



Government of Bengal

**Report of the
Land Revenue Commission
Bengal**

Vol. II

Appendices (I to IX)

AND

Indian Land-System Ancient, Mediaeval and Modern

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TABLE OF CONTENTS

	PAGE
APPENDIX I—	
Notification appointing the Commission and containing the terms of reference	1-3
APPENDIX II—	
Questionnaire	4-13
APPENDIX III—	
A.—List of associations and individuals who replied to the questionnaire ..	14-16
B.—List of associations and individuals who did not reply to the questionnaire	17-18
APPENDIX IV—	
List of associations and individuals examined in Calcutta	19-21
APPENDIX V—	
Places visited and persons examined in Madras, the Punjab, and the United Provinces	22-23
APPENDIX VI—	
The tour of the Land Revenue Commission, Bengal, in Madras	24-33
APPENDIX VII—	
The tour of the Land Revenue Commission, Bengal, in the Punjab ..	34-58
APPENDIX VIII—	
The tour of the Land Revenue Commission, Bengal, in the United Provinces	59-73
Introduction to Statistics by Sir F. A. Sachse, C.S.I., C.I.E. .. .	74-87
APPENDIX IX—Statistics :	
Table I—Area under cultivation and cultivable waste	88
Table II (a)—Yield of aman paddy	89
Table II (b)—Yield of aus paddy	90
Table II (c)—Yield of boro paddy	91
Table II (d)—Yield and price of jute	92
Table II (e)—Yield and price of gram	93
Table II (f)—Yield and price of pulses	94
Table II (g)—Yield and price of mustard	95
Table II (h)—Yield and price of linseed	96
Table II (i)—Yield and price of til	97
Table II (j)—Yield and price of sugarcane	98
Table II (k)—Yield and price of tobacco	99

	PAGE.
Table III—Variation in the prices of paddy between 1675 and 1936 ..	100-104
Table IV—Total area under different crops, their average yield and prices ..	105
Table V—Production and consumption of paddy	106
Table VI (a)—Number of estates, tenures, raiyati and under-rayati interest, the area held in khas by each class and the average area and incidence of rent of raiyati and under-raiyati interests	107-108
Table VI (b)—Mokarari raiyati holdings	109
Table VI (c)—Rent-free lands	110
Table VII—Statement of revenue and assets	111
Table VIII(a)—Statement of cultivated area and gross agricultural produce per acre and per head of agriculturist	112-113
Table VIII(b)—Distribution of areas held by a family	114-115
Table VIII (c)—Number of raiyati and under-raiyati interests held by the cultivating families	116
Table VIII (d)—Distribution of families living as bargadars and agricultural labourers and the rate of agricultural wages	117
Table VIII (e)—The manner in which lands are cultivated	118-119
Table VIII (f)—The manner in which the raiyati area transferred during last 12 years is cultivated	120-121
Table IX—Statement of cultivated and irrigated areas	122
Table X—Incidence of revenue in the different provinces	123
Note on the Indian Land-System, Ancient, Mediaeval and Modern (with special reference to Bengal), by Dr. Radha Kumud Mookerji, M.A., F.R.S., PH.D., M.L.C.	125-240

APPENDIX I.

No. 22716 L.R., dated Calcutta, the 5th November 1938.

Resolution by—The Government of Bengal, Revenue Department
(Land Revenue).

In pursuance of the announcement made in resolution No. 6414 L.R., dated the 2nd April 1938, published in an extraordinary issue of the *Calcutta Gazette* of that date, in regard to the decision of the Government of Bengal to appoint a Commission to enquire into the existing land revenue system of Bengal, the Governor is pleased formally to constitute the said Commission composed of the following personnel:—

Chairman.

Sir Francis Floud, K.C.B., K.C.M.G.

Members.

Sir Bijay Chand Mahtab, G.C.I.E., K.C.S.I., I.O.M., Maharajadhiraja
Bahadur of Burdwan.

Mr. M. O. Carter, M.C., I.C.S.

Khan Bahadur Saiyed Muazzamuddin Hosain, M.L.C.

Khan Bahadur Maulvi Hashem Ali Khan, M.L.A.

Mr. S. M. Masih, BARRISTER-AT-LAW.

Khan Bahadur M. A. Momin, C.I.E.

Sir Manmatha Nath Mookerjee, KT.

Dr. Radha Kumud Mookerjee, M.A., P.R.S., PH.D., M.L.C.

Mr. Brajendra Kishore Roy Choudhury.

Sir F. A. Sachse, C.S.I., C.I.E.

Names of two more Muslim members and of one Scheduled Caste member will be announced later on.

Secretary.

Mr. M. O. Carter, M.C., I.C.S.

The terms of reference to the Commission are:—

Generally, to examine the existing land revenue system of Bengal in its various aspects, with special reference to the Permanent Settlement; to estimate the effect of the system on the economic and social structure of Bengal; and its influence on the revenues and administrative machinery of the Provincial Government; to appraise the advantages and disadvantages of the existing system and to advise what modifications, if any, can and should be made, and in what manner, and in

	PAGE.
Table III—Variation in the prices of paddy between 1675 and 1936 ..	100-104
Table IV—Total area under different crops, their average yield and prices ..	105
Table V—Production and consumption of paddy	106
Table VI (a)—Number of estates, tenures, raiyati and under-rayati interest, the area held in khas by each class and the average area and incidence of rent of raiyati and under-raiyati interests	107-108
Table VI (b)—Mokarari raiyati holdings	109
Table VI (c)—Rent-free lands	110
Table VII—Statement of revenue and assets	111
Table VIII(a)—Statement of cultivated area and gross agricultural produce per acre and per head of agriculturist	112-113
Table VIII(b)—Distribution of areas held by a family	114-115
Table VIII (c)—Number of raiyati and under-raiyati interests held by the cultivating families	116
Table VIII (d)—Distribution of families living as bargadars and agricultural labourers and the rate of agricultural wages	117
Table VIII (e)—The manner in which lands are cultivated	118-119
Table VIII (f)—The manner in which the raiyati area transferred during last 12 years is cultivated	120-121
Table IX—Statement of cultivated and irrigated areas	122
Table X—Incidence of revenue in the different provinces	123
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The terms of reference to the Commission are:—

Generally, to examine the existing land revenue system of Bengal in its various aspects, with special reference to the Permanent Settlement; to estimate the effect of the system on the economic and social structure of Bengal; and its influence on the revenues and administrative machinery of the Provincial Government; to appraise the advantages and disadvantages of the existing system and to advise what modifications, if any, can and should be made, and in what manner, and in

what stages they should be effected. In particular, to examine the following questions:—

- (1) To what extent are the underlying principles of the Permanent Settlement of value to the social and economic structure of Bengal? Have those principles been defeated by the commercialisation of cultivating rights in land and, if so, to what extent would it be possible and expedient to reassert them by revising the process of commercialisation?
- (2) Comparing permanently-settled estates with temporarily-settled estates and Government estates, and comparing also the general level of rents in other Provinces and the economic condition of cultivators in Bengal with their condition in other Provinces, what is the case for adjusting the general level of rents of agricultural land in Bengal in one direction or another?
- (3) How has the existing machinery for fixing fair and equitable rents in Government and temporarily-settled estates in Bengal worked and how can it be improved? Are there adequate grounds for setting up an organisation for fixing fair rents for cultivators throughout the Province at regular intervals? On what principles should the fixing of fair rents proceed? Is a general fixing of fair rents possible without a radical alteration of the existing land revenue system?
- (4) Would it be financially and economically sound to fix the rents of cultivators in perpetuity?
- (5) Is it practicable and advisable for Government to acquire all the superior interests in agricultural land so as to bring the actual cultivators into the position of tenants holding directly under Government? If so, what would be the probable cost of such an operation, how long, would it be likely to take, and what would be its probable consequences on the economic, financial, administrative, and social structure of the Province? Would it be practicable to maintain the actual cultivators in the position of direct tenants of Government and, if so, by what method and what would be the implications of such a proposal?
- (6) How far has subinfeudation among landlords and raiyats affected their economic position as holders of land and to what extent can such position be improved by restrictions on subinfeudation?
- (7) To what extent can the credit value of holdings be raised and the borrowing facilities of cultivators improved by reducing the fragmentation of proprietary interest in holdings and by the maintenance of reliable records of title?
- (8) Does the existing procedure in Civil and Revenue Courts for realisation of rents operate efficiently and without undue hardship to tenants? What are the defects of the existing procedure, and what measures should be taken to remedy those defects?

Order.—Ordered that the resolution be published in the *Calcutta Gazette* and copies thereof forwarded to the Chairman and members of

No. 11804 L.R., dated Calcutta, the 17th November 1939.

Resolution by—The Government of Bengal, Revenue Department.
(Land Revenue).

In Resolution No. 22716 L.R. of the 5th of November 1938, the Land Revenue Commission was constituted and the names of certain members were published. At the end of the list a statement was made that the names of two more Muslim members and of one Scheduled Caste member would be announced later on.

It is now announced that the following gentlemen are appointed as members of the Land Revenue Commission:—

Mr. Abul Quasem.

Mr. Nuruddin Ahmed.

Mr. Anukul Chandra Dās, M.L.A.

APPENDIX II.

Questionnaire: Issued by the Land Revenue Commission, Bengal.

Question 1.—According to Regulation I of 1793, the objects of the Permanent Settlement were:—

- (a) to get rid of the frequent investigations for revision of the land revenue, which were considered detrimental to the prosperity of the province;
- (b) to encourage the zamindars to extend cultivation and to improve their assets by giving them the promise to enjoy the fruits of their good management and industry exclusively.

The *quid pro quos* were:—

- (a) No plea for leniency would be accepted if a zamindar failed to pay his dues in time. The estate to be sold forthwith if arrears occurred.
- (b) In future no claim for remission or suspension of revenue on account of calamities would be entertained.
- (c) The zamindars would extend to their subordinate tenants the same generous treatment which they were to receive from Government.

Is this description exhaustive of the duties and obligations of zamindars after the Permanent Settlement was concluded? Did the Permanent Settlement with the zamindars take away any existing rights from the tenants?

Question 2.—Did the Permanent Settlement convey any power to the zamindar to choose his tenants or to regulate the usage of the land to the economic interest of the Province?

Question 3.—What part have the landlords played in the economic development of the country since the Permanent Settlement? Do you consider that they failed to perform the functions expected of them at the Permanent Settlement? If so, what is the reason?

Question 4.—It is said that the Permanent Settlement converted the status of zamindars from collectors of revenue to actual proprietors of the soil. Is this correct, or were they actual proprietors before the Permanent Settlement?

Question 5.—It is contended that whatever may be the merits and demerits of the Permanent Settlement, its annulment would be a breach of a solemn pledge given by the East India Company to the zamindars. On the other hand, it is contended that this was a pledge to which the tenants were not parties and that it was a measure which permanently crippled the financial resources of the country. What arguments have you for or against these views?

Question 6.—One of the avowed objects of the Permanent Settlement was to encourage zamindars to extend cultivation and enjoy the fruits of their industry and good management. How far has this expectation been fulfilled? To what extent do you consider that the

large increase in the area brought under cultivation since the Permanent Settlement is due to:

- (i) the increase in population;
- (ii) the enterprise of tenants; and
- (iii) the initiative and the pecuniary or other assistance of zamindars.

Question 7.—The rent roll of the permanently settled area at the time of the Permanent Settlement was about 3 crores. It is estimated now at about 12 crores on the basis of settlement reports. The valuation, including khas lands according to cess revaluation figures is about 16 crores. How much of this increase would you ascribe to:—

- (i) The industry and good management of zamindars;
- (ii) Increase in cultivation and reclamation of waste lands by the efforts of the tenants;
- (iii) Enhancement of rents.

Question 8.—By the Permanent Settlement the zamindars were required and expected to conduct themselves with moderation towards their tenants and to secure to them the same equity and generous treatment as they were supposed to have received from Government. Has this expectation been fulfilled in actual practice? If not, in what manner and to what extent has it failed?

Question 9.—To what extent have the zamindars improved their estates by industry, enterprise and good management? In addition to extension of cultivation, did the Permanent Settlement impose on them any duties which they have failed to carry out? If so, to what extent is absenteeism responsible, and the lack of close touch between them and their tenants?

Question 10.—Do you think that the Permanent Settlement was in the interest of the country economically and for the greatest good of the largest number? Has it led to a revenue system which is to the benefit of the Province or to one which has resulted in the advantage of the landlords at the expense of the tenants?

Question 11.—The Permanent Settlement has been assailed on the following grounds:—

- (i) that it has led to the appropriation of nearly 80 per cent. of the income from land to the zamindar;
- (ii) that it has led to subinfeudation of tenancy;
- (iii) that it has led to enhancement of raiyati rents;
- (iv) that it has created a system of overlordship over the actual cultivators of the soil which is harassing and oppressive.

How far do you think this criticism is justified?

Question 12.—Do you advocate the abolition of the Permanent Settlement on any or all the above grounds?

Question 13.—It is argued that the continuance of the Permanent Settlement involves a loss to the State to the extent of about 75 per cent. of the raiyati assets, estimated at Rs. 12 crores. It is further

argued that this loss of revenue can be mainly or to a large extent removed by;

- (i) the total abolition of the zamindari system;
- (ii) the cancellation of the Permanent Settlement and substitution of the system of Temporary Settlement in its place;
- (iii) the imposition of a tax on agricultural income.

Do you advocate any of these methods: if so, why?

Question 14.—If you advocate (i) or (ii) would you give compensation to the zamindars: if so, how would you calculate it and in what form would you give it? What do you estimate would be the total sum required?

Question 15.—If compensation is paid in bonds carrying interest, should they be permanent or redeemable? If redeemable, after what period? What should be the rate of interest on these bonds?

Question 16.—What effect would State purchase of zamindaries have on the social structure of Bengal?

Question 17.—Is it your opinion that the interests of all tenure-holders between the zamindar and the raiyat should also be purchased by the State, and the raiyat should come directly under Government? Will this change lead to any advantage?

Question 18.—What additional machinery would be required to carry on the administration under the changed conditions and what would be the estimated cost?

Question 19.—Do you think the raiyats would prefer to come under Government, and pay rent to it direct. Do the khas mahal raiyats enjoy any advantages over tenants under the proprietors of permanently settled and temporarily settled estates?

Question 20.—Do you think that one result of the Permanent Settlement was to encourage sub-infeudation, and the creation of permanent tenures by zamindars? In what way has the creation of permanent tenures affected the position of the raiyats economically and socially?

Question 21.—What effect would the State purchase of all tenures have on the social and economic position of the Province and of the tenure-holders themselves?

Question 22.—If the zamindaries and tenures are purchased by the State, how should their homesteads and khas lands be dealt with? What will be the criterion for the ascertainment of zamindars' and tenure-holders' khas lands?

Question 23.—Is the occupancy right of raiyats a creation of British legislation or did some similar right exist from an earlier period?

Question 24.—It is alleged that the cultivating raiyats have always been the actual proprietors of the soil, and the rents paid by them to the State were a form of tax for affording protection to their person and property and for carrying on the administrative machinery. Do you subscribe to this view? If so, what, in your opinion, does the word "proprietor" connote in this connection?

Question 25.—The Tenancy Act of 1885 confined the occupancy right to one of the chain of persons interested in the land, namely, the occupancy raiyat. The Tenancy Act of 1929 gave occupancy rights to

a large number of under-raiyats also. Are you in favour of maintaining or extending this principle and allowing the occupancy right to more than one grade of tenant; or of confining it to the tenant actually cultivating the soil?

Question 26.—If you consider that the right of occupancy in all cases should vest in the actual cultivator of the soil instead of in the statutory raiyat, how would you protect:

- (a) tenants partly cultivating their own lands and partly subletting them?
- (b) the raiyats who have sublet their entire holdings?

Question 27.—Was it the intention of the Permanent Settlement to give protection to all classes of tenants including non-agriculturists? Are you in favour of giving occupancy rights to non-agricultural tenants?

Question 28.—Is there any reason why statutory rights intended to protect the interests of cultivators should persist in land which has been converted to use for non-agricultural purposes? If so, do you approve of the State levying any additional tax for such converted holdings, and what should be the manner and extent of such imposition?

Question 29.—Is the number of bargadars, bhagchasis, adhiars and others cultivating on a share of the produce on the increase? If so, what in your opinion are the causes of this increase?

Question 30.—It is suggested that the factors that mainly contribute to the increase are:—

- (i) that the amending Act of 1929 has not given the bargadars any statutory rights;
- (ii) the facilities for transferring occupancy rights to non-agriculturists given by the Act of 1929; and
- (iii) an increase in the cultivation on the barga system of holdings which raiyats have sold during the economic depression in order to meet their financial liabilities.

How far do you think the above is correct?

Question 31.—What do you think is the area normally held by the bargadar? Do the majority of bargadars also hold land in raiyati or under-raiyati right?

Question 32.—Do you consider that the right of occupancy and other rights should be extended to bargadars? If not, how would you protect them and to what extent?

Question 33.—In your opinion, is the barga system economically sound? If not, how would you prevent its extension?

Question 34.—What will be the effect of giving occupancy rights to bargadars? Do you think such protection will lead the zamindars and others to keep the so-called khas lands in their direct possession, and that a large number of people now cultivating as bargadars will be thrown out of employment?

Question 35.—What is a fair proportion of produce payable by bargadars? Should a maximum limit be fixed by law?

Question 36.—What are the wages of agricultural labourers and how does their economic position compare with that of bargadars and under-riayats?

Question 37.—Do you think that the unrestricted right of transfer given by the Act of 1929 had led to the passing of considerable areas of raiyati lands to non-agriculturists? Have the further facilities given by the Act of 1938 increased this tendency? If so, will this not be prejudicial to the interest of the cultivating raiyats as a whole? Are you in favour of restricting transfer to agriculturists only? Is this practicable, and have you any other suggestions?

Question 38.—What in your opinion is the minimum size of an economic holding?

Question 39.—Is it not a fact that the size of many raiyati holdings is uneconomic? Is it not the case that the laws of inheritance, the statutory rights of transfer and the increase of population are all tending to further subdivision and fragmentation of holdings?

Question 40.—If, in your opinion, consolidation of holdings is desirable and practicable for more economic cultivation, how would you bring it about?

Question 41.—Would you give any special facilities to a cultivator to consolidate his holding by exchange or increase its size by purchase or otherwise in order to make it an economic holding?

Question 42.—On the other hand do you consider accumulation of large areas in one particular hand undesirable? If so, what limit would you place on such accumulation? And how would you prevent acquisition of raiyati holdings, to avoid it?

Question 43.—Do you agree that coparcenary is detrimental to good cultivation, and if so, can this evil be minimised without interfering with the laws of inheritance?

Question 44.—What can be done to stop or reduce the evil effects of coparcenary and fragmentation in estates and tenures?

Question 45.—Do you think it desirable to compel co-sharer landlords by legislation to arrange for collection?

Question 46.—By the Permanent Settlement 257 lakhs out of total ascertained assets of 285 lakhs was assessed as Government revenue. It was assumed that this assessment though it may have been excessive at the time would become moderate in future as a result of the extension of cultivation, and other means taken by the landlords to improve their income.

Was it contemplated that one of the means adopted by the landlords for increasing their income or profits would be by enhancing the rates of rent payable by tenants at the time the Permanent Settlement was made?

Question 47.—Is it your view that the framers of the Permanent Settlement when they made the Government revenue permanent and unalterable, contemplated similar permanency and fixity of the rates of rent either in the case of tenants then existing or in the case of tenants who might subsequently be introduced on the land? On what grounds do you base your belief?

Question 48.—If you believe that the rents of those tenancies which existed at the Permanent Settlement were meant to be fixed in perpetuity, do you support your view by—

- (a) the terms of the Permanent Settlement Regulation, or
- (b) any other Regulation, or
- (c) any Act, or the declarations of the authorities who were concerned with the Permanent Settlement, or
- (d) the wording of sections 50 (1) and 6 of the Bengal Tenancy Act which assume that if a tenant had paid the same rate of rent for 20 years he could be presumed to have held at that rate from the time of the Permanent Settlement and therefore must have the right to fixity of rent, or
- (e) the general ground that when the revenue of the zamindars was made unalterable, if it was intended that the rents of raiyats should not remain unalterable also, the State could not have allowed the zamindars to get the entire benefit of any enhancements of raiyati rents.

Question 49.—Supposing that it was the intention of the framers of the Permanent Settlement that the rents of the tenants then existing should never be increased, is there any case for reducing the rents of such tenants in future, or retrospectively, to the level prevailing at the time of the Permanent Settlement? Is there sufficient material available for determining what those rates were, and for distinguishing those tenants who are successors in interest of tenants existing at the Permanent Settlement and those who have taken settlement subsequently? Have you any practical proposals for removing any grievances which you think the tenants may have?

Question 50.—If it was the intention that the rents of either class of raiyats should remain unalterable, was it a mistake of Government to provide in all Tenancy Legislations since 1859 for enhancement on the ground of rise of prices of staple food crops? If not, why not?

Question 51.—Do you consider it was the intention of the framers of the Permanent Settlement that all future settlements of waste lands should be made at the pargana rates, that is to say, at the rates prevailing in 1793? If so, what action do you suggest should be taken to give effect to that intention?

Question 52.—What should be the principle of determining fair and equitable rents in Bengal?

The following are among the systems which have been tried or advocated in other Provinces:—

- (1) Economic rent, i.e., the difference or half the difference between the produce of land just repaying the cost of cultivation, and land which owing to its situation or superior fertility yields produce of a much higher value.

This principle tries to secure that at least half the unearned increment of all lands goes to the landlord or the State, as the case may be, in the shape of rent or revenue.

- (2) Another version of economic rent, which is half the profit of the cultivator, after paying all the expenses of cultivation including the food of himself and his family.
- (3) A definite share of the produce. The disadvantage of this system is that the poorer land pay higher rent in proportion.
- (4) A percentage on the market value of the land. Madras Settlement reports attach great importance to the market value of the land. According to the Bengal Urban Land Assessment Act, this is an important consideration in fixing a fair rent.
- (5) Customary rates, adjusted or not adjusted, according to the change in prices of staple products.
- (6) Rents fixed by competition.

Question 53.—To what extent are the present rents paid by cultivators either under the proprietors of permanently settled estates or under Government Estates based on any of these principles now? Can the majority of them be described as lump rents? To what extent would you say they are fixed on (a) custom, (b) competition and (c) consideration of the productivity of the land? Is it true that in practice the rates differ greatly for lands of similar value in almost every village and estate?

Question 54.—Is it your experience that the poorer and weaker tenants pay higher rents in many estates?

What factors besides those suggested in the previous questions have played a part in fixing the existing rents in Bengal?

Question 55.—Assuming that all zamindars and middlemen between the State and the raiyat are removed, would you recommend the readjustment of rents on a uniform basis throughout all parts of the Province? What principle or procedure would you recommend? Could it be done without preparing a new record-of-rights?

Question 56.—If you consider that a definite share of the produce or its equivalent in cash should be paid by all cultivators either to the State or to the existing landlord, what share would you recommend for universal adoption?

Question 57.—When rent has once been determined on the above or any other principle, should it be fixed in perpetuity, or alterable according to the money value of the produce and the needs of the State from time to time? If you think that the rates of rent should be re-examined from time to time, what period would you fix?

Question 58.—Would there be any advantage in the substitution of an income-tax on profits from agriculture in place of rent? If incomes below a certain figure were exempted from the tax, would not the result be that a large proportion of the land in Bengal would escape the payment of revenue and would not the proportion steadily tend to increase?

Question 59.—In what respects do you consider the principles and procedure for fixing fair and equitable rents and for enhancing rents under the Bengal Tenancy Act have been defective?

Question 60.—Do you object to enhancements as a result of fluvial action on the ground that the landlord has done nothing to bring them about? Is it fair that a particular tenant should get all the benefit of the improvement and the State or landlord nothing?

Question 61.—Do you object on principle to enhancements on account of rise in prices?

Question 62.—Do you think that enhancements on the ground of rise of prices should be given in the case of tenants who require their whole crops for their own consumption?

Question 63.—If there were provisions in the law for a reduction of rent on the ground of prevailing rates would you object on principle to this ground of enhancement? Are you afraid that sufficient consideration might not be given to improvements effected long ago at the raiyat's own expense, or to advance rent having been paid long ago in the shape of salami?

Question 64.—Should there be a provision of law for reducing high contractual rents or for limiting rents for new settlements?

Question 65.—What do you consider the chief defects in Chapter X of the Bengal Tenancy Act for the settlement of rent (a) in temporarily-settled Government Estates, and (b) permanently settled estates. Do you consider that the procedure for (a) and (b) is justified?

Question 66.—Do you know of any cases where the settlement of fair rents in private estates under section 105 of the Bengal Tenancy Act resulted in unfair enhancements? Was it the fault of the Settlement Courts or the Special Judges?

Question 67.—Is it true that revisional settlements are usually made with the primary object of enhancing revenue?

Question 68.—Do you know of any particular estates where the enhancements were obviously unfair?

Question 69.—Was it in your opinion a mistake on the part of the Government to go on with any revisional settlement and to enhance the rent of any raiyat during the years when prices were steadily going down? Has this policy led to any legitimate grievance on the part of the tenants?

Question 70.—What is the reason that rates of rent for similar lands in different districts within khas mahals vary considerably?

Question 71.—According to Government rules, remission of rent can be given by Collectors in khas mahals in years of failure and partial failure of crops. The zamindars of permanently-settled estates can get remission of revenue provided the calamity is of such nature that test works have had to be opened in the area where their estates lie, and provided also the zamindar has given a written undertaking not to collect any rents either directly or through the courts from his tenure-holders and raiyats during the period for which he applied for suspension or remission of revenue. He must also satisfy the Collector that there are substantial current and arrear rents not collected. Before the Collector recommends the petition, he must be satisfied that the zamindar has issued intimation to the tenants and that a legal and binding remission has been made. In all the classes of estates, remission of revenue can only be granted if corresponding remissions are given to the under-tenants.

Is it a fact that in permanently-settled areas remissions are not ordinarily given and in khas mahal areas are not given to a sufficient extent? What are the reasons? How could the rules be improved?

Question 72.—What do you consider to be the average yield and cost of cultivation per acre of jute, paddy and sugarcane?

Question 73.—Have you any evidence that the productivity of the soil in Bengal is generally on the decrease? If so, what is the reason? Have Government taken any steps to improve the fertility of the soil, including sufficient distribution of manures and improved seed?

Question 74.—How far have the provisions of the Bengal Land Improvement Act, Bengal Sanitary and Agricultural Improvement Act and the Bengal Rural Development Act been taken advantage of to improve the lands of agriculturists? What are the reasons for the provision of these Acts not being extensively taken advantage of?

Question 75.—Government used to spend considerable sums of money for improvement of agriculture in the colonisation and khas mahal areas. Is it a fact that such expenditure has been considerably restricted in recent years? If so, why?

Question 76.—Is salami realised by Government at the time of settlement of new lands in khas mahals? If so, since when? Is salami or any portion of it utilised in improving the agricultural condition of these lands?

Question 77.—How far in your opinion is the general policy of Government or the land system of Bengal responsible for the present uneconomic condition of the raiyats? Can you suggest any modifications?

Question 78.—What is the average income of a raiyat (a) from his holding, (b) from other sources? What percentage of cultivating raiyats can maintain themselves and their family from the income?

Question 79.—Do you consider the present system and organisation of the maintenance of land records satisfactory? If not, what improvements would you suggest? Is it, in your opinion, feasible to maintain continuous and accurate land records in small units of villages on the lines on which they are maintained in the United Provinces, and to include in such records a full statement of the crop on each plot from year to year?

Question 80.—What suggestions have you for increasing the income of the cultivating raiyats?

The following are suggested as means of increasing their income:—

- (i) Increase in the yield of the lands by improved methods of cultivation.
- (ii) By giving them supplementary occupation during the slack reason.
- (iii) By establishing cottage industries.
- (iv) By the development of collective or co-operative farms and co-operative marketing organisations.
- (v) By the establishment of a system of cattle insurance.

Question 81.—Do you think that one of the main reasons of the poverty of the agriculturists is the pressure of population on the land?

What percentage of the population you consider to be surplus in respect of the agricultural needs of the country?

Question 82.—What are your proposals for relieving the pressure? It is said that the only means of doing so is to divert them to large industries by starting Government-aided factories. Do you subscribe to this view?

Question 83.—What are your suggestions for the improvement of agricultural credit? Does any efficient organisation, Government or private, exist?

Question 84.—It is estimated that 25 per cent. of the gross produce of land goes to the mahajans as interest alone. Do you agree to this? If so, what are your suggestions for stopping this annual drain?

Question 85.—How far in your opinion have the co-operative credit societies succeeded in tackling the credit problem of the agriculturists? Is the rate of interest realised by the co-operative societies from the agriculturists too high? Have the co-operative societies actually benefited the agriculturists to any appreciable extent? If not, why? What percentage of the agriculturists are members of such societies? What percentage of the co-operative societies have actually succeeded in wiping out the debts of their members?

Question 86.—How far have debt settlement boards been able to deal with the problem of agricultural debts? Are there any defects? Have you any suggestions for improvement?

Question 87.—It is suggested that the Government should establish agricultural banks in every Union to finance the agriculturists in times of need with short term loans. What is your opinion regarding this?

Question 88.—How far in your opinion have the land mortgage banks functioned? Have you any suggestion for their improvement?

Question 89.—Is it a fact that the machinery available to the landlords for prompt realisation of their dues is too costly and cumbrous? It is unnecessarily harassing and expensive to the tenants? Have you any improvements to suggest?

Question 90.—Is the recovery of rents through the Public Demands Recovery Act harassing and objectionable? If so, why? What is your suggestion for the speedy recovery of rents?

Question 91.—What is your opinion as regards the advisability or otherwise of removing complications in the revenue laws by revising and codifying them in a more up-to-date and simple form? In particular would you support the repeal of the old Regulations and earlier Acts and replace them by a simple Act embodying their main provisions?

Question 92.—Is there any revenue law or regulation which operates harshly on the landlords and tenants and which in your opinion should be amended or repealed? If so, give details.

Question 93.—What do you consider is likely to be the economic effect of the Tenancy Act Amendment of 1938 on landlords and tenants? What is your estimate of the loss of landlords' income owing to the abolition of transfer fees?

APPENDIX III.

A.—List of associations and individuals who replied to the questionnaire.

I.—Landholders' Associations.

1. Bakarganj Landholders' Association.
2. Bankura Landholders' Association.
3. Bengal Landholders' Association.
4. British Indian Association.
5. Burdwan Landholders' Association.
6. Chittagong Landholders' Association.
7. Dinajpur Landholders' Association.
8. East Bengal Landholders' Association.
9. Faridpur Landholders' Association.
10. Hooghly Landholders' Association.
11. Howrah Landholders' Association.
12. Jessore Landholders' Association.
13. Khulna Landholders' Association.
14. Malda Landholders' Association.
15. Midnapore Landholders' Association.
16. Midnapore Zamindari Company.
17. Mymensingh Landholders' Association.
18. Nadia Landholders' Association.
19. Noakhali Landholders' Association.
20. Sundarban Landholders' Association.
21. Manager, Paikpara Raj.
22. Manager, Tagore Raj Estate.
23. Additional Manager, Burdwan Raj.

II.—Associations concerned with tenants.

1. Bengal Provincial Kisan Sabha.
2. Dacca District Muslim Federation.
3. Middle Class Peoples' Association, Mymensingh.
4. Peoples' Association, Dacca.
5. Peoples' Association, Khulna.
6. Rajshahi Muhammadan Association.

III.—Bar Associations.

1. Barisal Bar Association.
2. Burdwan Bar Association.
3. Dacca Bar Association.
4. Dinajpur Bar Association.
5. High Court Bar Association.
6. Jalpaiguri Bar Association.
7. Khulna Bar Association.
8. Malda Bar Association.
9. Midnapore Bar Association.
10. Mymensingh Bar Association.
11. Nadia Bar Association.
12. Noakhali Bar Association.
13. Pabna Bar Association.
14. 24-Parganas Bar Association.
15. Rajshahi Bar Association.
16. Tippera Bar Association.

IV.—Anjuman Associations.

1. Anjuman-E-Mikatul Islam, Hooghly.
2. Anjuman-I-Islamia, Mymensingh.
3. Anjuman-Ettefaque-E-Islamia, Nadia.

V.—Political Parties.

1. Bakarganj District Krishak Proja Party.
2. Nikhil Banga Krishak Proja Samity.

VI.—Government and ex-Government Officers.

1. Mr. W. H. Nelson, C.S.I., I.C.S., Member, Board of Revenue.
2. Mr. L. R. Fawcus, C.I.E., I.C.S., Commissioner, Dacca Division.
3. Mr. F. W. Robertson, C.I.E. (I.C.S., retired), ex-Settlement Officer and ex-Commissioner of a Division.
4. Mr. A. E. Porter, I.C.S., Collector of Tippera.

5. Mr. M. M. Stuart, I.C.S., Collector of Nadia.
6. Mr. S. K. Dey, I.C.S., Additional Collector, Dacca.
7. Khan Bahadur Md. Mahmood, Collector of Pabna.
8. Rai Rebati Mohan Chakrabatti Bahadur (retired Magistrate and Collector).
9. Rai Bijay Bihari Mukherjee Bahadur, retired Director of Land Records and Surveys, Bengal.
10. Mr. M. Carbery, D.S.O., M.C., Director of Agriculture, Bengal.
11. Mr. S. C. Majumdar, B.C.S., M.I.E., Chief Engineer, Irrigation Department.
12. Mr. S. C. Mitter, B.C.S. (Eng.), A.M.I.E. (India), Director of Industries, Bengal.
13. Babu Benoy Bhushan Das Gupta, B.C.S. (Representative of the Finance Department).
14. Khan Bahadur M. Arshad Ali, Registrar, Co-operative Societies, Bengal.
15. Khan Bahadur Ataur Rahman, retired Assistant Commissioner of Income-tax, Calcutta.
16. Rai Mahendra Nath Gupta Bahadur, retired Deputy Magistrate and Deputy Collector (drafted Bengal Tenancy Amendment Act of 1928).
17. Rai Kalipada Maitra Bahadur, Manager, the Estate of the Nawab of Murshidabad.
18. Rai Jitendra Nath Sircar Bahadur, retired Deputy Magistrate and Deputy Collector, Bengal. Now Manager, Cossimbazar Raj Wards' Estate.
19. Khan Sahib Maulvi Kazi Md. Mohiuddin, ex-Khas Mahal Officer.
20. Babu Jogesh Chandra Chakrabarti, B.C.S., Khas Mahal Officer, Mymensingh.
21. Maulvi Khalil Ahmed, B.C.S., Khas Mahal Officer, Noakhali.
22. Babu Satya Chandra Halder, Khas Mahal Officer, Bakarganj.
23. Babu Prafulla Chandra Mitra, Khas Mahal Officer, Faridpur.

VII.—Miscellaneous.

1. Mr. A. C. Gupta, Advocate, High Court.
2. Australian Baptist Mission, Rev. Victor J. White.
3. Bangiya Brahman Sabha.
4. Bengal Mahajan Sabha.
5. Bengal Provincial (Co-operative) Bank.
6. Hindu Sabha.
7. Dr. Naresh Chandra Sen Gupta, Advocate, High Court.
8. Sir Nalini Ranjan Chatterjee, ex-High Court Judge.
9. Dr. Radha Kamal Mukherjee.
10. Dr. Sarat Basak, Senior Government Pleader.

B.—List of associations and individuals who did not reply to the questionnaire.

I.—Landholders' Association.

1. Birbhum Landholders' Association.
2. Bogra Landholders' Association.
3. Dacca Landholders' Association.
4. Darjeeling Landholders' Association.
5. Jalpaiguri Landholders' Association.
6. Murshidabad Landholders' Association.
7. North Bengal Landholders' Association.
8. Pabna Landholders' Association.
9. 24-Parganas Landholders' Association.
10. Rajshahi Landholders' Association.
11. Rangpur Landholders' Association.
12. Tippera Landholders' Association.
13. Manager of the Estate of Raja of Bhagyakul.
14. Manager of the Estate of Raja of Dighapatia.
15. Manager of the Estate of Maharaja of Mymensingh.
16. Manager of the Estate of Maharaja of Natore.

II.—Associations concerned with Tenants.

1. All-Bengal Namasudra Association.
2. All-Bengal Scheduled Caste Federation.
3. Bengal Presidency Moslem League.
4. Burdwan Muhammadan Association.
5. Central National Muhammadan Association.
6. District Muslim Association, Midnapore.

III.—Bar Associations.

1. Bankura Bar Association.
2. Birbhum Bar Association.
3. Bogra Bar Association.
4. Chittagong Bar Association.
5. Darjeeling Bar Association.
6. Faridpur Bar Association.
7. Hooghly Bar Association.
8. Howrah Bar Association.
9. Jessore Bar Association.
10. Murshidabad Bar Association.
11. Rangpur Bar Association.

IV.—*Anjuman Associations.*

All District Associations except those of—

- (i) Hooghly.
- (ii) Mymensingh.
- (iii) Nadia.

V.—*Political Parties.*

- 1. Congress Party.
- 2. Depressed Class Party.
- 3. European Group.
- 4. Independent Proja Party.
- 5. Liberal Party.
- 6. Proja Party.

VI.—*Government and ex-Government Officers.*

- 1. Mr. T. I. M. N. Chowdhury, I.C.S., Director of Rural Reconstruction, Bengal.
- 2. K. C. Dey, C.I.E. (I.C.S. retired), late Member, Board of Revenue, Bengal.
- 3. Khan Bahadur Kamaruddin Ahmed.
- 4. Maulvi Abdus Sadeque, Professor of Economics, Islamia College, Calcutta.
- 5. Mr. H. P. V. Townend, C.I.E., I.C.S., Commissioner of the Burdwan Division.

VII.—*Miscellaneous.*

- 1. Mr. Anant Prosad (Contributor to Landholders' Journal).
- 2. Khan Bahadur Azizul Huq, C.I.E.
- 3. Bengal Chamber of Commerce.
- 4. Bengal National Chamber of Commerce.
- 5. Professor Benoy Kumar Sarkar.
- 6. Chittagong Chamber of Commerce.
- 7. Professor Humayun Kabir.
- 8. Indian Catholic Association.
- 9. Indian Tea Association.
- 10. Khwaja Shahabuddin, C.B.E., M.L.A., of Dacca.
- 11. Muslim Chamber of Commerce.
- 12. Narayanganj Chamber of Commerce.
- 13. Mr. Nausher Ali, ex-Minister.

APPENDIX IV.

List of associations and individuals examined in Calcutta.

I.—Landholders' Associations.

No.	Name of Association.	Names of the witnesses present on behalf of the Association.	Date of Examination.
A.	B.	C.	D.
1	Midnapore Zamindary Company.	(1) Mr. David Somerville (2) Mr. Andrew Somerville. (3) Mr. G. W. Woodgates. (4) Mr. Keith Smith.	7th March 1939.
2	Mymensingh Landholders' Association.	(1) Maharaja Sashikantha Acharyya Choudhury, M.L.A. (2) Mr. Jnanendra Nath Lahiri, B.L. (3) Mr. Jitendra Kishore Acharyya Choudhury. (4) Mr. Surendra Nath Sen. (5) Mr. Mohini Chandra Roy.	9th March 1939.
3	British Indian Association.	(1) Maharaja Sashikantha Acharyya Choudhury, M.L.A. (2) Raja Bahadur Bhupendra Narayan Singha, M.L.C., of Nashipur. (3) Mr. Tarak Nath Mukherji, M.B.E. (4) Mr. S. C. Ghosh Moulik, C.I.E. (5) Mr. P. N. Singh Roy. (6) Mr. Sachin Sen.	13th March 1939 and 14th March 1939.
4	Sundarban Landholders' Association.	(1) Mr. B. C. Ghose (2) Mr. J. K. Ghose. (3) Mr. N. N. Dalal. (4) Mr. A. D. Addy. (5) Mr. P. N. Brahma. (6) Mr. M. S. Chakravarty. (7) Rai Sahib W. C. Dey.	27th March 1939.

No.	Name of Association and individuals.	Names of the witnesses present on behalf of the Association.	Date of Examination.
A.	B.	C.	D.

II.—Associations concerned with tenants.

- | | | | |
|---|--------------------------------|---|---------------------|
| 1 | Bengal Provincial Kisan Sabha. | (1) Mr. Bankim Mukherji,
M.L.A.
(2) Mr. Rebati Barman.
(3) Mr. Nirmal Sen Gupta.
(4) Mr. Subrata Nag. | 22nd March
1939. |
|---|--------------------------------|---|---------------------|

III.—Bar Associations.

- | | | | |
|---|-----------------------------|---|------------------|
| 1 | Dacca Bar Association .. | (1) Mr. Monimohan Das
(2) Mr. Satis Ch. Mazumder. | 8th March 1939. |
| 2 | Alipore Bar Association | (1) Mr. Phanindra Nath Brahma.
(2) Mr. Srish Ch. Halder.
(3) Mr. Sachindra Kumar Roy Choudhury. | 16th March 1939. |
| 3 | High Court Bar Association. | (1) Mr. A. M. Bose, Bar-at-Law. | 25th March 1939. |

IV.—Anjuman Associations.

- | | | | |
|---|-----------------------------|---|---------------------|
| 1 | Mymensingh Anjuman-I-Islam. | (1) Khan Sahib Nurul Amin.
(2) Maulvi Abdul Momen Khan.
(3) Maulvi Samad Ali. | 23rd March
1939. |
|---|-----------------------------|---|---------------------|

V.—Political Party.

- | | | | |
|---|---------------------------------|---|---|
| 1 | Bakarganj District Proja Party. | (1) Syed Habibur Rahman.
(2) Babu Debendra Nath Ghose.
(3) Syed Abdus Sattar. | 10th March 1939
and 11th March 1939. |
|---|---------------------------------|---|---|

VI.—Government and ex-Government Officers.

- | | | |
|---|---------------------|---|
| 1 | Mr. S. C. Mitter .. | 20th January
1939 and 21st
February 1939. |
| 2 | Mr. K. P. Maitra .. | 23rd January
1939. |

No.	Name of Association and individuals.	Names of the witnesses present on behalf of the Association.	Date of Examination.
A.	B.	C.	D.
3	Mr. M. M. Stuart ..	....	24th January 1939.
4	Mr. W. H. Nelson ..	....	6th February 1939.
5	Mr. M. Carbery ..	....	7th February 1939.
6	Mr. J. C. Chakravarty ..	....	8th February 1939.
7	Mr. J. N. Sircar ..	....	9th February 1939.
8	Mr. F. W. Robertson ..	....	10th February 1939.
9	Mr. S. K. Dey ..	....	13th February 1939.
10	Mr. L. R. Fawcus ..	....	14th February 1939.
11	Mr. S. C. Mazumder ..	....	15th February 1939.
12	Mr. A. E. Porter ..	....	16th February 1939.
13	Mr. B. B. Das Gupta ..	....	20th February 1939.
14	Mr. S. C. Halder ..	....	} 22nd February 1939.
15	Mr. K. Ahmed ..	....
16	Khan Bahadur A. M. Ashad Ali.	....	23rd February 1939.
17	Khan Bahadur Ataur Rahman.	....	24th February 1939.
18	Rai Bahadur M. N. Gupta.	....	21st March 1939.

VII.—Miscellaneous.

1	Dr. Radha Kamal Mukherjee.	....	15th March 1939.
2	Bengal Mahajan Sabha	(1) Mr. Aswani Kumar Ghose. (2) Mr. Tarun Kumar Roy.	17th March 1939.
3	Dr. S. C. Basak ..	....	18th March 1939.
4	Bengal Provincial Co-operative Bank.	(1) Mr. S. K. Chatterjee (2) Rai Bahadur Nagendra Nath Mookherjee, O.B.E.	20th March 1939.
5	Australian Baptist Mission.	(1) Rev. Victor J. White	24th March 1939.

APPENDIX V.

Places visited and persons examined in Madras, the Punjab, and the United Provinces.

NAMES OF MEMBERS WHO VISITED OTHER PROVINCES.

Madras, Punjab and United Provinces.

1. Sir Francis Floud, K.C.B., K.C.M.G. (*Chairman*).
2. Mr. M. O. Carter, M.C., I.C.S. (*Secretary*).
3. Sir F. A. Sachse, C.S.I., C.I.E.
4. Sir Bijay Chand Mahtab, G.C.I.E., K.C.S.I., I.O.M., Maharaja-
ghiraja Bahadur of Burdwan.
5. Dr. Radha Kumud Mukherjee, M.A., P.R.S., PH.D., M.L.C.
6. Khan Bahadur M. A. Momin, C.I.E.
7. Khan Bahadur Maulvi Hashem Ali Khan, M.L.A.

Madras and United Provinces.

8. Khan Bahadur Saiyed Muazzammuddin Hossain, M.L.C.

Punjab and United Provinces.

9. Mr. Anukul Chandra Das, M.A., B.L., M.L.A.
10. Mr. Nuruddin Ahmed, B.L.

United Provinces only.

11. Mr. Abul Quasem, M.A., B.L.

Places visited and persons examined in Madras.

Madras—

- (1) Revenue Minister (The Hon'ble Mr. T. Prakasan).
- (2) Revenue Secretary (Mr. B. G. Holdsworth, I.C.S.).
- (3) Registrar of Co-operative Societies.
- (4) Director of Agriculture.

Chingleput—

- (1) A leading lawyer of the District Munsiff's Court at Poonemallee.
- (2) Mr. Narasinha Chariar, Advocate.
- (3) Officials.

Vizagapatam—

- (1) Sri B. Venkatapathi Raju, C.I.E.
- (2) Sri Dewan Bahadur D. Sriramasastry, M.L.A. (Standing Counsel to many zemindars).
- (3) Sir D. V. Ramaswamy Pantulu, M.L.A. (Congress).
- (4) Sri Rao Bahadur A. Jagannadhras Pantulu, B.A., B.L. (Retired Deputy Collector) (Estate Manager, Vizianagram Estate).

(5) Sri M. Krishnarao Naidu, B.A., Deputy Collector in charge of the Records-of-right and Settlement of rent operations under the Estates Land Act, Pathapatnam.

(6) Sri Joseph Reddi, B.A. (Deputy Collector), Dewan of Bobbili Estate.

In addition to the above, a number of tenants were examined in the villages which the Commission visited.

Places visited and persons examined in the Punjab.

Places—Lahore and Amritsar, Jhelum and Lyallpur districts.

Persons examined—

1. Mr. C. C. Garbett, C.S.I., C.M.G., C.I.E., F.R.G.S., I.C.S., Financial Commissioner, Punjab.
2. The Hon'ble Sir Sunder Singh Majithia, Revenue Minister, Punjab.
3. Director of Land Records.
4. Khan Bahadur Shaik Khurshed Mahummad, Retired Deputy Commissioner and Member, Legal Remembrancer Committee, Punjab.
5. Director of Industries.
6. Deputy Registrar, Co-operative Societies.
7. Director of Agriculture.
8. Assistant Registrar, Consolidation of Holdings.
9. Mr. Brayne, C.I.E., I.C.S., Financial Commissioner, Development.
10. Sir G. C. Narang, ex-Minister, Punjab Government.

The Commission visited several villages in each of the above districts and examined a number of villagers in addition to the officials and non-officials at district headquarters.

Places visited and persons examined in the United Provinces.

Places—Lucknow and Aligarh, Agra, Jhansi and Benares districts.

Persons examined—

1. Mr. Waugh, I.C.S., Settlement Commissioner.
2. Mr. Cooke, I.C.S., Revenue Secretary.
3. Mr. Marsh, C.S.I., C.I.E., I.C.S., Adviser to the Governor, Revenue.
4. Mr. Walley, I.C.S., Debt Legislation Officer.
5. Mr. Sahay, I.C.S., Deputy Secretary, Agriculture Department.
6. Mr. Maya Das, Deputy Director, Agriculture Department.
7. Mr. Tarakeswar Prasad, Assistant Director, Land Records.
8. Khan Bahadur A. Aziz, Irrigation Department.
9. Registrar, Co-operative Societies.

In the four districts visited the Commission met officials and non-officials at district headquarters, and in each district it visited several villages and examined a number of villagers.

APPENDIX VI.

The Tour of the Land Revenue Commission, Bengal, in Madras.

Itinery.—The Commission arrived in Madras on January the 7th, 1939, and spent a week in the Presidency, partly at headquarters and partly in Chingleput and Vizagapatam districts. On January the 9th, the Commission had discussions with the Hon'ble Minister, Revenue Department, the Members of the Board of Revenue, the Revenue Secretary, the Registrar of Co-operative Societies, and the Director of Agriculture. On the following day, it visited several villages in Chingleput district which is in the raiyatwari area, i.e., managed direct by Government. On 11th January, the Commission examined a number of witnesses from that district, and on the 12th travelled to Vizagapatam, which is in the permanently-settled area. There it had discussions with the Collector, and with several leading non-officials and the Managers of some of the principal estates in that district. On the 13th, the Commission carried out economic enquiries in rural areas of Vizagapatam and after further discussions on the 14th, it returned to Calcutta on the 15th.

Agricultural conditions.—The general condition of the villages which we visited seemed to us rather inferior to that of the average Bengal village, although some of the members who visited the Madras Presidency, do not agree with that view. The village sites are compact and the homesteads lie close together. In areas which are developed owing to improved communications, or in close proximity to towns, the houses are well constructed, though small, and the roofs are covered with tiles. But in the rural areas, the houses are semi-circular in shape, the walls being built of mud and the roofs thatched with palmyra leaves. Seen from a distance, the village looks rather like a cluster of Bengal paddy *golas*. There is no space round the homesteads, as in Bengal, containing fruit trees, tanks, vegetables and the like. The homesteads are exempted from assessment.

Land and crops.—The two principal classes of soil are the black cotton soil which is mainly found in the ceded districts, and the red soil which is found all over the Presidency. But for revenue purposes, the main classifications are "wet", or irrigated land, and "dry", or unirrigated land. In the raiyatwari area "wet" land is rather less than one-fifth of the total area. The crop grown on that land, to the exclusion of almost all other crop, is rice. The yield varies considerably on wet and dry land. On wet land it is estimated to be 21 maunds per acre and on dry land, where the acreage under rice is comparatively small, the yield is about 14 maunds. The percentage of the net cultivated area covered by rice is 30 compared with 66 in Bengal.

On dry land, the principal crops grown are sugarcane, cotton, ground-nuts, cholam, cumbu, and ragi. Of these the only crops of any value are sugarcane, which is grown on a negligible area, and cotton and ground-nuts which are grown on 7 per cent. and 10.6 per cent. respectively of the net cultivated area. The other crops grown on dry land are of little value. We were told that the value of the usual crops grown on dry land, i.e., ragi, cholam and cumbu would only be one-third of the value of a paddy crop. Manure is essential on all lands if they are to grow an average crop. The Madras tenant spends more on manure than the Bengal raiyat.

In the Kistna and Godavari deltas, the land is very much more fertile than in the rest of the Presidency. Two or even three crops are grown annually, and the value of the produce is considerably higher than in the average district.

The value of all crops in the Presidency was estimated by the Madras Banking Enquiry Committee in 1929 to be 164.54 crores. According to the Committee's figures of acreage the value of all crops per acre would be Rs. 49-8. At that time prices were nearly double what they have been during the economic depression. In order to ascertain the value of all crops per acre, an estimate has been made on the basis of season and crop reports over a period of five years. The average area under each crop, and the average price of each crop have been calculated, and in a few cases where prices were not available, the same figures have been adopted as in the case of Bengal. According to this estimate, the value of all crops per acre comes to Rs. 34-6. The net cultivated area, according to the figures supplied by the Revenue Department, is 31.7 million acres. The valuation of the gross produce in the Presidency would thus amount to 109 crores.

Irrigation.—Irrigation is essential in order to obtain a normal yield of paddy. The sources of irrigation consist mainly of reservoirs, which are maintained by Government in the raiyatwari area, and by the zamindars in the permanently-settled area. It was generally agreed on all sides that Government maintenance of irrigational sources is more efficient. In the raiyatwari area the water rate is consolidated with the assessment. Pattadars, or tenants holding directly under Government, are responsible for taking water to their land from the distributing channels.

The total expenditure on the maintenance of irrigation sources is 65 lakhs a year.

Land Revenue System.—The raiyatwari area covers 92,866 square miles, and the permanently-settled area 43,102 square miles. The total of land revenue is 7.19 crores. At the time of the Permanent Settlement in 1802, the Government demand was assessed at half of the gross produce, of which two-thirds was assigned as the Government share and one-third was retained by the zamindars. At that time, the great majority of rents were paid in kind. Up till 1855, the rate of assessment varied from half to three-fifths of the produce from irrigated lands, and about two-fifths of the produce from unirrigated lands. These rates were considered to be excessive, and it was decided to survey the whole raiyatwari area and to base the assessment on the productive powers of the soil. The maximum assessment was to be 30 per cent. of the gross produce. In 1864 it was decided that the assessment should be made not on the gross produce, but should be half of the net produce, i.e., the value of the gross produce after deducting all costs of cultivation. This is still the maximum Government demand.

The Government assessment is made on land and not on the pattadar:—that is to say it may be realised either from the pattadar or, if he has sublet, from his sub-tenant. We were unable to obtain any figures to indicate the extent of subinfeudation below the pattadars. The records prepared after 1864 do not take any notice of the sub-tenants; they are concerned only with the direct tenants under Government. Considerable inconvenience has resulted from the economic and statistical point of view.

We were however given several estimates of the extent of subinfeudation. In Chingleput, which is not far from Madras, a number of the pattadars are non-residents or non-cultivators. It was estimated that 12 per cent. have sublet their lands in one tahsil of that district. Other estimates were higher or lower. The general view was that there is little subinfeudation, because the rents paid by the pattadars do not as a rule allow a sufficient margin of profit.

System of assessment.—There are two principles that govern all the processes gone through at a settlement. One is that the assessment is on the land and does not depend on the kind of crop grown (except that on wet land the assessment includes a charge for water) or on the caste and circumstances of the person who holds the land. The Settlement Officer's first duty is to classify the various kinds of soil in the tract to be settled with reference to their productive capacity. For this purpose soils are divided into series with reference to the obvious characteristics known to every cultivator, e.g., the black cotton soil is put into one series and the red soil in another. These series are further subdivided with reference to the amount of clay or sand which they contain, and experiments have been carried out over a fixed area of each of the kinds of soil to determine its productive capacity. In early settlements these experiments were very elaborate. As many as 2,000 plots were sown with paddy on wet land and with the selected main food crop of the tract on dry land, and the crop produced on each plot estimated. As a result of these experiments the Settlement Officer was in a position to calculate with fair accuracy the normal yields to be expected from an acre of each of the various kinds of soil found in the tract under settlement. These figures, expressed in Madras measures of 120 tolas, are called the grain outturns. They were converted into money values, not at the current prices prevailing at the time of settlement, as these might for various reasons be abnormal, but at the average of the prices of twenty non-famine years immediately preceding the settlement.

The second principle governing the settlement comes into operation at this stage. The data so far obtained would enable the Settlement Officer to estimate in money the gross produce of each holding; but this is not his ultimate object. His object is to estimate the net produce, i.e., the clear profit accruing to the cultivator after all contingencies have been allowed for. Deductions are therefore made from the gross outturn to represent—

- (i) an allowance for cartage of the grain to the nearest market;
- (ii) an allowance for merchant's profit;
- (iii) an allowance for vicissitudes of seasons;
- (iv) an allowance for unprofitable areas such as bunds and channels included in holdings;
- (v) the cost of seed;
- (vi) the cost of ploughing cattle;
- (vii) the cost of agricultural implements;
- (viii) the cost of manure; and
- (ix) the cost of labour.

A percentage deduction varying from 10 per cent. to 27 per cent. is made from the conversion rates to cover the cost of carting the grain

to the nearest market and the profits of the merchants who buy it. When this deduction has been made the figure obtained is known as the commutation rate.

Another percentage deduction varying from $6\frac{1}{4}$ per cent. to 25 per cent. is then made as an allowance for vicissitudes of seasons and unprofitable areas.

The remaining deductions are grouped under the head of cultivation expenses. They were carefully and liberally calculated, expressed in terms of money, and deducted from the figure previously arrived at.

When all this had been done the Settlement Officer could fix the assessment on any given holding. He knew the area of the various fields or subdivisions included in it, the sort of soil to be found in each of them, and he had estimated the money value of the net profit per acre accruing from their cultivation. Fifty per cent. of this net profit was claimed as the maximum Government share. But if the villages in which these lands are situated were in the case of wet lands served by irrigation sources which did not contain an absolutely assured supply all the year round, or in the case of dry lands lay far from markets or roads, the assessment was much reduced.

Much misunderstanding prevails about this 50 per cent. net figure. In the first place, the figure only applied to a part of the land assessed, i.e., those lands that lie in villages most favourably situated for carrying on agriculture and disposing of the crop. Land not so situated was more lightly assessed. In the second place, Government's 50 per cent. share even on the most favourably situated lands was in practice considerably less. In every calculation made by the Settlement Officer the cultivator received the benefit of the doubt. It was assumed for instance that he grows on his dry land the staple food crop of his district, but he may grow a valuable industrial or garden crop yielding a much higher gross outturn and a proportionately higher profit. He may have no unprofitable areas in his holding or these may be infinitesimal. It was assumed that he pays for labour to cultivate his lands; he may not do so. It was assumed that he manures his land, but if he does, he may simply use the dung from his own cattle. His cartage expenses may be very small or he may be fortunate enough to have his market in his own village.

A re-settlement is made after 30 years, and consists of a fresh calculation of Government's share of the net produce. Where the pattadar has sunk a well or made a tank to irrigate his land, the Government do not claim a share in the profits resulting therefrom. But where improvements of other kinds have been made, Government claim a share of the profits. For example, a railway is built through a backward tract of country. This opens up new markets and land is planted with valuable marketable crops. It is claimed that a moderate share of the profits so gained should go to Government. Government also claim a share in the profit resulting from a rise in prices, and for this purpose the commutation rate is calculated afresh from the prices prevailing in the raiyats' selling months in twenty non-famine years during the course of the expiring settlement. (If prices fall, this recalculation would, of course, result in a reduction of the assessment.)

When a second crop is grown, the area covered by it is assessed at half the rate for the first crop.

If strict theory were adhered to, a Settlement Officer's duty at re-settlement would be to restore with reference to this revised commutation rate Government's share to its theoretical 50 per cent. of the net profits. To do this it would be necessary to raise the rates in the proportion that the revised commutation rate bears to the original rate less a deduction for a proportionate rise in the cost of cultivation. In practice this is not done. Government have left with the raiyat by far the greater part of the profit due both to generally improved economic conditions and to the rise in prices which has taken place during the currency of all settlements that have come up for revision. If the theoretical 50 per cent. net share had been retained Government would have had to raise the assessment in such districts as Tanjore, East and West Godavari by 75 to 100 per cent. But since 1924 Government have limited the enhancement to a maximum of 18½ per cent.; and even before 1924 enhancements went above 30 per cent. only in rare instances and small areas.

This also explains why it has not been generally considered necessary at re-settlement to make elaborate and expensive re-calculations of cultivation expenses or grain outturns. Any rise in the former or variation in the latter has been more than covered by the difference between the enhancement that could justifiably be made and the 18½ per cent. that is the maximum enhancement that Government actually make.

Rights of tenants.—In the raiyatwari area the pattadars have always had rights of occupancy and the right of free transfer. In the permanently-settled area they had virtually no rights until 1908 when the Estates Land Act was passed. Until then they had only the right to cultivate from year to year. The Estates Land Act gave them the right of occupancy and the right of free transfer.

During the economic depression, the number of transfers to non-agriculturists has increased in Madras in the same way as in Bengal. The Government have had under consideration the question of restricting transfer, but up to the present no legislation has been introduced.

The sub-tenants have no rights whatever. Their tenancies are governed entirely by contract and they are no better off than the bargadars in Bengal. The only exception is in Malabar where they have certain rights. One reason for this is that there are, in that area, some pattadars whose income may be as much as half a lakh and whose position is actually equivalent to that of a proprietor or a large patnidar in Bengal.

Rents are enhancible both in the raiyatwari and permanently-settled area. In the former, the only ground of enhancement is for a rise in prices. In the latter, enhancements have been made at various periods both before and after the passing of the Estates Land Act. Thus in the Vizianagram Estate, the rent-roll at the time of the Permanent Settlement was 7½ lakhs and it is now about 24 lakhs. The increase on account of the extension of cultivation is estimated to be 8½ lakhs and the remaining 8 lakhs is accounted for by enhancement.

Revenue and rent.—The average rate of the Government assessment works out to Rs. 2-9 per acre in the raiyatwari area. Owing to the system of assessment which has been described above, the rates vary very greatly with the productivity of the soil. In the most fertile districts, the rate for wet land is as much as Rs. 10 or Rs. 12

or more per acre; for instance, the rate for first class wet land in Godavari is as high as Rs. 14-4; in Guntur Rs. 12-8; in Trichinopoly Rs. 11-14; in Kistna Rs. 11-4; whereas for fifth class wet land, the rate is as little as Rs. 3 in Ganjam and Rs. 3-6 in Salem. For dry land, the rates are considerably lower. The best dry land is assessed as high as Rs. 6; the worst at only a few annas per acre.

The average rate of assessment works out to between Rs. 7 and Rs. 8 per acre for wet land and Re. 1 to Re. 1-4 for dry land. The average rate of assessment—Rs. 2-9 per acre—is low because the percentage of dry land in the raiyatwari area is more than 80 per cent. of the whole.

The following figures are taken from the Land Revenue Administration Report of 1936-37. They show the number of single and joint pattas, the area of wet and dry land contained in them, and the assessment:

				Assessment.
				Rs.
Single pattas	..	3,723,478	Dry .. 13,170,459	4,00,17,614
			Wet .. 3,777,399	
Joint pattas	..	2,446,104	Dry .. 9,100,713	2,01,77,078
			Wet .. 1,498,547	

If a rate of rather more than Rs. 7 per acre is taken for wet and another of about Re. 1 for dry land, and the areas of each class are multiplied by these rates, it will be found that the result is approximately the same as the assessment.

In the permanently-settled area, the rates of rent are higher than in the raiyatwari area. This statement was made by all witnesses. It is not however possible to find out the exact rates because records hardly exist except in estates under the Court of Wards. The opinion of the revenue authorities whom we consulted was that the rate of rent might be taken for practical purposes as being 50 per cent. in excess of the Government assessment in the raiyatwari area. Assuming this to be correct, the average rate of rent for one-third of the province would be Rs. 3-14 per acre and the average for the Presidency as a whole would be Rs. 3 per acre.

Rents paid by sub-tenants are extremely high and amount normally to half of the crop. Generally half of the crop is paid, but where the rent is paid in cash it approximates to that amount. According to the revenue authorities, the pattadar's assessment is on an average one-fifth of what he receives from his sub-tenant. The Revenue Department gave the following examples:—

Godavari and Kistna deltas—rentals are 7 to 10 times the assessment on wet lands, and 4 to 6 times the assessment on dry lands.

Tanjore—rentals are 4-7 to 13-3 times the assessment on wet lands, and 7 to 11 times the assessment on dry lands.

Kurnul—rentals are 9 times the assessment on dry lands, and 2 to 3 times the assessment on wet lands.

In the best lands in the deltaic areas, rents of as much as Rs. 75 an acre are paid by sub-tenants, but these are exceptional.

Direct tenants of Government and of the zamindars pay road cess at 9 pies on each rupee of rent, and education cess of $4\frac{1}{2}$ pies per rupee of rent in addition to their revenue or rent. The zamindars who collect the cess pay cent. per cent. of the road cess and also of the education cess out of their own pockets. Sub-tenants, even on cash rents, pay nothing.

Area of holdings.—The total population of the Presidency, according to the 1931 Census, is 46.7 million. According to the Census of 1901, the percentage of the agricultural population was 69, and according to the 1921 Census it was 71. In the 1931 Census, the system of classification was different, and as a result of this change the agricultural population was returned as only 46 per cent. of the whole. The report states however that actually there is not much difference from the percentage of 1921. Assuming 70 per cent. to be the proportion, the agricultural population would number 32.7 million. The total net cultivated area is 31.7 million acres and the average area per head of the population is therefore slightly less than one acre.

It was stated by the Revenue Department that there are 7 million adult agriculturists; and assuming one per family the average area owned by a family would be $4\frac{1}{2}$ acres. According to the figures quoted in the previous paragraph to show the number of single pattas and the area covered by them, the average area of each patta is also $4\frac{1}{2}$ acres. This may be regarded as the average area in the possession of an agricultural family.

We were told that the minimum area required for the maintenance of an average family would be about 5 acres, of which 2 to 3 acres must be wet land. It was estimated that 2-3 acres of average wet land would be just sufficient for the maintenance of a family, but that 2 acres of dry land would also be required for fodder and for other purposes. It seems therefore that the average area in possession of a family in Madras is barely sufficient for its maintenance. The same problem exists, as in Bengal, of uneconomic holdings and the splitting up of holdings. The sub-division of tenancies is going on even more rapidly than in Bengal owing to the pressure of the population. Seventy-four per cent. of the pattas or raiyatwari holdings covering 36 per cent. of the total area have an average area of 2.4 acres. Pattas with a rent of one rupee or less increased from 664,568 to 1,299,353 between Fasli 1310 and 1325 and from 1,299,353 to 2,395,954 between 1325 and 1335¹. From the evidence which we recorded and from our own observations, we think that more cultivators in Madras than in Bengal must be compelled to make a subsidiary income from hiring carts, cutting earth and from other means. The number of agricultural labourers in Madras is extremely large. It was returned in the last Census as 44 per cent. compared with 29 per cent. in Bengal.

Recovery of revenue and rent.—The organisation for revenue administration and collection of rent is as follows: In every village there is a headman in charge of collection and general administration who is called the village munsiff. His pay is generally Rs. 13-8, but in small villages it is only Rs. 7 or Rs. 9. He has a clerk known as a Kurman whose pay is Rs. 8, and 2 or 3 paliars or peons on a pay of Rs. 6 each. This staff is responsible not only for collection, but also for village watch and ward, and for sending information to the police.

All revenue and rent, whether in the raiyatwari or zamindari area, are realised through Revenue Courts. In the raiyatwari area there are practically no arrears of revenue. If the assessment is not paid, distraint of crops can be made through the village officers, or the holding can be sold. Sales are not however frequent. In cases where a pattadar has sub-let, and fails to pay his assessment, the sub-lessee frequently pays the Government demand in order to avoid distraint of his crops, and deducts the amount from the rent payable to his pattadar. For this payment he receives a receipt.

In the permanently-settled area, the zamindar has to apply to the Revenue Court for realisation of arrear rents. The same process is followed, but it takes rather longer to conclude the proceedings than in the raiyatwari area. Generally the period is about 9 months.

The system of realisation by Revenue Courts, working through village officers seems to be much more rapid and efficient than the Civil Court system, and it certainly avoids the large accumulation of arrear rents, which is so common in Bengal estates. The arrears of the Vizianagram estate, which has a rent roll of 24 lakhs, amount to just over one year's rental.

Agricultural improvements.—The budget of the Agricultural Department is about 22 lakhs per year. The Presidency is divided into 4 circles, each in charge of a Deputy Director, and each Deputy Director has under him three or four Assistant Directors. An Assistant Director is in charge of 2 districts and has under him one demonstrator for each taluq. There are also 4 crop specialists employed by Government for the improvement of paddy, cotton, oil and other seeds. The improved seeds are distributed to the cultivators through the demonstration staff; but as the area under each demonstrator may consist of as many as a hundred villages, it seems that the rural organisation is insufficient to carry out distribution on a wide scale. The improved seeds are not distributed free: they are sold at market rates, plus the cost of transport, etc. The Department has recently started bee-keeping as a subsidiary occupation for the agriculturists and it is now engaged in making experiments in order to develop an improved breed of poultry. There are however no demonstration farms.

Co-operative movement.—There are three kinds of co-operative institutions in the province: land mortgage banks, rural co-operative societies and sale and marketing societies. Madras has made much greater progress than Bengal in the establishment of Land Mortgage Banks. There are now 115 in the Presidency. But, as in Bengal, the debtors cannot clear off their loans if they amount to more than 50 per cent. of the value of their property. The Central Land Mortgage Bank has issued loans amounting to 1.4 crores. The Central Bank borrows at 3 per cent. and lends money to the Land Mortgage Banks at 4½ per cent. Borrowers get money from the Land Mortgage Banks at 5½ per cent. and repayment is spread over 20 years.

The organisation of co-operative societies is the same as in Bengal, but the rate of interest, 7½ per cent., is lower. In Madras, the mistake of mixing up long-term and short-term credit has been avoided, and consequently few of the rural societies have been compelled to go into liquidation during the slump. The policy of granting loans for short-terms has been in force since 1929. The total capital employed on

short-term loans is 2.11 crores. The rural societies cover about 6 per cent. of the agricultural population. There are now about 11,000 societies.

In order to encourage marketing societies, the Government has lent the services of Co-operative Inspectors and advances money for the construction of godowns. Twenty-five per cent. of the cost of construction is a grant and the remaining 75 per cent. is recovered over 30 years. There are now 118 sale societies under a central marketing society. In order to ensure that the loans are utilised for the purposes for which they are granted, a system of credit control has been introduced. The borrower has to bring all his produce to the sale society which undertakes to sell it to the best advantage. There is one sale society in each taluk consisting of 60 or 70 villages. The members of such societies are allowed loans for the payment of land revenue or for urgent domestic needs, provided that the amount does not exceed 60 per cent. of the value of the produce.

Agricultural debt.—Agricultural debt was estimated by the Madras Banking Enquiry Committee in 1929 to amount to 150 crores. In the same year, the agricultural debt in Bengal was estimated to be 100 crores. Agricultural debt therefore works out to Rs. 46 per head of the population of Madras, as compared with Rs. 32 in Bengal. On the other hand, the value of land is high in Madras compared with that in Bengal. The average value of wet land in Nellore district ranged during the period 1928-33 from Rs. 319 to Rs. 1,056 per acre, and in Karnul district in 1929-33 the rates varied from Rs. 150 to Rs. 896.

In order to meet the situation that has developed during the economic depression, the Government has established Debt Adjustment Boards, and has passed the Madras Agriculturists' Relief Act which came into effect in March 1938.

The work of Debt Adjustment Boards may prove to be more effective in Madras than in Bengal because Government made arrangements by which the debtor could borrow the necessary amount to pay off his adjusted debt by new borrowing financed from Government funds. The amount available was necessarily limited by the budget provision, and could never be available to all debtors in one year or even over a series of years. As in Bengal, the Debt Adjustment Boards have had no compulsory powers; every adjustment of scaling down had to be with the consent of the creditor.

In Madras the Agriculturists Relief Act was passed in March 1938 with the object of scaling down existing debts, reducing the rate of interest on future debts, and writing off arrears of rent. Debts are classified into two categories: those which were incurred before, or after, 1st October 1932. In the former class, all interest outstanding on that date is wiped out, and only the principal, or such portion as may not have been paid, is due from the agriculturists. If the repayment of principal and interest taken together amount to double the principal, the entire debt is wiped out. If they amount to less than twice the principal, only the difference is payable.

In the case of debts incurred after 1st October 1932, the principal or such portion of it as may be outstanding is not affected and has to be repaid. Relief is given only in respect of interest, which is calculated at 5 per cent. simple interest. All payments made towards interest are deducted from the interest calculated at this rate, and

only the balance, if any, remains due from an agriculturist. For future loans, i.e., loans incurred after the 22nd March 1938, interest has been limited to $6\frac{1}{4}$ per cent. simple interest.

If any immovable property of an agriculturist had been sold on or after the 1st October 1937, the debtor was entitled to apply to the court within 90 days of the passing of the Act to have the sale set aside. The interest of the creditor was safeguarded by providing that any alienation of immovable property made by the debtor after the 1st October 1937, would be invalid against his creditor. If movable property had been sold after the same date, the sale held good, but the decree-holder was required to refund any sum received in excess of his claim as a result of the sale.

APPENDIX VII.

The Tour of the Land Revenue Commission, Bengal, in the Punjab.

Itinerary.—The Commission spent 9 days in the Punjab, partly at headquarters, where it met a number of officials, and partly in three districts. On the 18th and 19th November the Commission met the Hon'ble Minister, Revenue, the Financial Commissioner, Revenue, the Director of Industries, the Director of Land Records, and one of the members of the Punjab Land Revenue Committee which recently submitted its report to Government. On the 20th November the Commission visited Amritsar district where settlement work is in progress. Accompanied by the Settlement Officer, the Commission visited Bhoewal village where it met a number of landholders and saw how the assessment is prepared in practice. On the 21st and 22nd, the Commission visited Jhelum district, principally with the object of seeing consolidation work being carried out. Jhelum district is also under settlement, and is one of the less fertile districts in which the irrigated area is not large. On the 23rd and 24th, the Commission visited Lyallpur district. We were taken over the Agricultural College and shown the work that is being done to produce improved seeds, and also the industrial section of the College. We then visited three villages—Dhandra, Dasua and Jhokbhutta. Lyallpur district was selected because it is one of the colony districts. It is a fertile district irrigated by canals. Like other colony districts, it has provided surplus land for areas where the population has increased beyond the capacity of the soil. During its tour in Lyallpur district, the Commissioners were accompanied by Mr. Brayne, who has been responsible for organising rural reconstruction in the Punjab. On its return to headquarters, the Commission met the Deputy Registrar of the Co-operative Department, the Director of Agriculture, the Assistant Registrar of Consolidation of Holdings, the Financial Commissioner, the Development Commissioner (Mr. Brayne), and a former Minister—Sir G. C. Narang.

Agricultural conditions.—The cultivators are strong upstanding men well clothed, as is necessary in a cold climate, and well nourished. They are divided into agricultural tribes and groups, e.g., Sikhs, Rajputs, Jats, Arans, etc., and among the Muslims also there are divisions corresponding to Hindu castes.

The village community is self-contained. Each village has its own artisans, blacksmiths, cobblers, carpenters, etc., who work for the village community and are paid by the whole village when the grain is divided after each harvest. The village sites are compact and the homesteads lie close together. In an average village, the walls are built of mud, the ceilings are supported by wooden rafters and the roofs are made of mud or of tiles covered with mud. They are extremely neat and clean, and the utensils and spoons are arranged with almost military precision. The more prosperous landholders have houses built of bricks, and in one of the model villages which the Commission visited in Lyallpur, all the houses were built of bricks except those of the menials and of the poorest cultivators. Where rural reconstruction had made progress, we were struck with the improvements in sanitation. Every house was well ventilated and many of them had outdoor bath-rooms with hand pumps. Some of them had chimneys and all of them were

neatly kept. There was an evident pride of ownership. The cattle-sheds were well built and neatly kept, and in most cases were properly ventilated. Almost every house had a machine for chopping fodder.

There is little grazing land for cattle but it is the general rule that fodder crops are grown for the cattle. These are larger and stronger than the Bengal cattle and they are better housed and tended than in Bengal.

From what we saw of the condition of the agricultural classes, it is evident that the standard of living is higher than in Bengal; and in areas where rural reconstruction had made headway, the Punjab is far in advance of Bengal. It would be impossible to find in Bengal a village where nearly all the houses are built of bricks, where the village roads are well laid out and planted with trees, and where there is such an obvious desire for improving the standard of living. Judging from the general condition of the villages which we visited and from the number of cattle and buffaloes in the possession of the cultivators, the Punjab agriculturists appear to be more prosperous than the tenants in Bengal. The women spend their spare time in reeling cotton, and making carpets, rugs, bed-spreads, cloth, etc., many of which are of excellent design, and are not the result of any training.

Land and crops.—In the Punjab, the productivity of the soil depends mainly upon the water-supply, and the yield of the different crops varies in proportion to the amount of water received. There are three main classifications of land for irrigation purposes:—nahri, or land irrigated from canals; chahi, land irrigated from wells; and barani, land irrigated by rainfall. The principal crops are wheat, cotton (of which there are two varieties: deshi and American), gram, millet, maize, rice, oil-seeds (toria, sorsan, etc.) and sugarcane. The following figures taken from the Season and Crop Report of 1938 show the area under the principal crops, the estimated total yield, the average yield per acre and the percentage above or below the normal out-turn:—

Crop.	Area in thousand acres.	Total yield in thousand tons.	Average yield per acre.	Percent- age above or below normal.
1	2	3	4	5
Wheat	9,945	3,724	10½ maunds ..	+23
Cotton (deshi)	1,695	582	·36 bale*	+58
Cotton (American)	1,440	559	·36 bale* ..	
		bales.		
Gram	3,755	640	4·6 maunds ..	—38
Millet	2,615	239	2½ maunds ..	—38
Rice	1,086	546	13·7 maunds ..	+22
Seed	740	105	3·9 maunds ..	—27
Maize	1,103	406	10 maunds ..	+7
Sugarcane	510	389	20·8 maunds ..	+12

*A bale is 400 lbs. Yield is therefore 1·8 maund cleaned cotton. One maund of uncleaned cotton produces 13—14 seers cleaned cotton. The yield of uncleaned cotton would thus be nearly 5½ maunds.

There are two main harvests—the kharif in the summer and the rabi in the winter. As soon as the kharif crop has been reaped, cultivation

begins for the rabi crop. Consequently, the cultivators do not sit idle to the same extent as they do in Bengal. There are however slack seasons in the cultivating year, and the Department of Industries has a programme for the development of cottage industries to occupy the cultivators during their spare time.

It is difficult to give any one figure which will represent the average value of crop per acre. The yield differs greatly on barani land, which may receive a very small rainfall, and on nahri land which is regularly irrigated with canal water. It has also to be remembered that what is called the matured area, i.e., the area on which crops are sown but excluding the area on which crops fail, is constantly varying. The same is the case with the acreage under various crops. Some indication may however be obtained by a comparison of the figures supplied by the Irrigation Department, the Director of Land Records and the Government of India's Agricultural Statistics. According to the Irrigation Department's figures, the irrigated area is 11.78 million acres and the estimated value of crops is 379.4 million rupees. This gives an average of about Rs. 32 an acre. The Director of Land Records' estimate is based on the average outturn of 13 principal crops. He estimates that the average might be taken at nearly 8 maunds, the value of which according to price levels during the last five years would be Rs. 25. On the basis of the figures published in the Government of India's Statistics the average value of crops per acre would be Rs. 20-13. We might say that the average value of crops per acre is about Rs. 25.

Irrigation.—The irrigation system of canals is the most outstanding work of agricultural improvement in the Punjab. The area irrigated by canals is 11.78 million acres or rather more than one-third of the cultivated area of the Province. The capital expenditure up to date is nearly 38 crores and the return on this outlay over the whole system has been about 9 per cent. The canal colonies comprise 5.35 million acres out of the total irrigated area. The Government had two objects in creating these colonies: to relieve the pressure of population in the congested districts and to create flourishing villages which would be superior to the average in civilisation and comfort. Colonisation has been carried out in 8 districts. The policy is to settle a good type of cultivator belonging to the same agricultural group as far as possible in the newly-colonised areas. The unit of settlement is the morubba, or rectangle of land, which may be 25 or 28 acres in area. Normally one rectangle is allotted to each family but more than one may be given. The rectangles have been made large in size with the intention of providing against the subdivision of holdings which must inevitably occur through the laws of inheritance. The policy has been entirely successful and has led to prosperity and to a large increase of population. In the thirty years between 1901 and 1931, the population in the 8 colony districts has risen from 4.95 millions to 7.81 millions. The increase is most marked in the Montgomery and Lyallpur districts where the population has increased, respectively, from 430,000 to a million, and from 577,000 to 1,015,000.

The total amount paid in water rates is Rs. 4.06 crores which works out to an average incidence of about Rs. 3-8 per acre. The rate, however, varies greatly for different crops. Sugarcane, which requires more water than most other crops might cost Rs. 10 an acre, whereas wheat would cost very much less. The rate for rice land is about

Rs. 7-8 an acre. A concession is made in the case of fodder crops which are assessed at half the normal rate. Irrigation by canal water is entirely at the option of the landholder. There is no compulsion of any sort; but in practice the demand for water exceeds the supply. In Lyallpur district it is not possible to supply sufficient water to irrigate 100 per cent. of the land. The water supplied is sufficient to irrigate about 80 per cent. of the cultivated area, and the owners are expected to keep the remainder fallow in order that the land may recoup its strength. The water rates are in theory occupier's rates; that is to say they are to be paid by the tenant where land has been sublet. But in practice this is not always the case. In Lyallpur district the general custom is that the tenant pays half of his landlord's revenue, and the landlord pays half of the *abiana* or water rate. The collection of water rate is carried out by the *lambardars* (village headmen) who receive 3 per cent. of the collections from Government.

The policy of colonisation has helped to solve the difficulty of overpopulation and subdivision of holdings into uneconomic units. The land for further colonisation is however small, and the Province will be faced in the future to an increasing extent with the problem of uneconomic holdings.

Canal irrigation has also increased the value of land considerably by ensuring against crop failures. A morubba of 25 acres has been known to sell for as much as half a lakh, i.e., Rs. 2,000 per acre, but this was exceptional. A morubba of the same area brought in Rs. 1,000 a year as rent in 1927, when high prices prevailed. The present letting value would be between Rs. 200 to Rs. 400 according to its marketing facilities. The rental value of land would thus be between 8 to 16 rupees per acre, and the general level may be taken to be between 10 and 12 rupees at present. This was the rate which was generally found in the areas visited by the Commission. Taking the value of land at 25 times the rental, the present price would be Rs. 250 to Rs. 300 per acre. Besides canal irrigation, the chief source of irrigation is from wells. The number of wells in working order according to the Season and Crop Report of 1938 was 332,182. The area irrigated from a well is about 5 to 6 acres so that about 1.8 million acres are irrigated by this method.

Agricultural improvements in the Punjab consist mainly of the provision of irrigation sources. If a tenant sinks a well he may be given occupancy rights by his landlord. The general custom is that the share of a crop paid on well-irrigated land is one-third, instead of half of the produce. When settlement operations are in progress, an allowance is made for the cost of sinking wells, and no increase is made in the assessment until twice the capital cost of sinking the well has been recovered.

Land Revenue System.—The land revenue system was inherited from the Sikh administration. In theory the State is the supreme owner of all land and as such it is entitled to a share of the produce. Throughout the British administration, and up till 1928, it was considered that the State could fairly claim one-half of whatever was left over after the needs of the peasant-proprietor had been satisfied. In 1928, the Unionist Party succeeded in having the State's share of the produce reduced to one-fourth of the net assets. The Government demand was revised at intervals which were generally 20 years, but recently legislation has fixed the period at 40 years. The Financial

Commissioner, Revenue, is inclined to think that this is too long a period. Until the economic depression in 1929, every re-assessment of the Government demand had resulted in an increase, and settlements had become to the popular mind synonymous with enhancements. Now that prices have been at a low level for 10 years, reduction has become a possibility and there is no longer the same objection. The disadvantages of long-term settlements are that the records tend to fall out of date and the State may lose a share in the unearned increment, specially where urban areas have developed.

The next cardinal point of the revenue system is that the Government demand is assessed on the land and not on the individual. In practice the demand is fixed on the village as a whole and the landholders in a particular village are jointly liable for its payment. If one landholder purchases the holding of another landholder, he becomes liable for the revenue fixed upon that holding during the period of settlement.

The Punjab is owned by peasant-proprietors, most of whom are small landholders. The agricultural population numbers 13·6 millions according to the Census figure of 1931 out of a total population of 23·6 millions. It seems rather strange that in a province where there are few large towns or industrial areas, the agricultural population is such a small percentage. The cultivated area is 31 million acres. According to the Report of the Punjab Land Revenue Committee, 20 per cent. of the landowners hold less than one acre. Mr. Calvert, a former Financial Commissioner, estimated that 18 per cent. of the landowners possess about half an acre, 40 per cent. $2\frac{1}{4}$ acres, and 26 per cent. $8\frac{1}{2}$ acres. The position may be illustrated from the Land Revenue Committee's Report which gives the following figures for small owners:—

Amount of revenue assessed on those who pay up to—	Amount paid in lakhs.	Number of land revenue payers in lakhs.
1	2	3
Rs.		
5	32·26	17·6
10	78·61	24·2
20	146·89	29·1
25	170·08	31·4

The number of big landholders is comparatively few. The number of landholders who pay more than Rs. 500 in revenue is only about two thousand.

The Quinquennial Report ending 1927 shows that nearly 44 per cent. of the cultivated land is tilled by the land-owners themselves; rather more than 7 per cent. by occupancy tenants and 47 per cent. by tenants-at-will. The following figures have been supplied by the Revenue Department:—

	Acres.
(1) Total cultivated area	31,041,660
(2) Area cultivated by owners and tenants of the lessees holding directly under Government in colony	12,908,188
(3) Area cultivated by tenants free of rent or at nominal rent	489,113

	Acres.
(4) Area cultivated by occupancy tenants paying revenue rates with or without malikana ..	1,744,812
(5) Area cultivated by occupancy tenants paying cash rents	301,327
(6) Area cultivated by occupancy tenants paying in kind with or without any addition in cash ..	347,507
(7) Area cultivated by tenants-at-will paying at revenue rates with or without malikana ..	1,306,068
(8) Area cultivated by tenants-at-will paying other cash rents	2,311,585
(9) Area cultivated by tenants-at-will paying in kind with or without any addition in cash ..	11,543,060

It will be clear from the above that there must be a considerable section of the proprietors who do not own sufficient land for the maintenance of their families and have therefore to take settlement of additional land as tenants under landholders who have a surplus area. The position is somewhat similar to that of the occupancy raiyat in Bengal who has an uneconomic area and has to take land as a bargadar.

The Revenue Department has given the following figures which show the total charge on land:—

	Rs.
(1) Ordinary land revenue demand (1937-38) ..	4,69,44,000 (A)
(2) Ordinary land revenue collections (1937-38) ..	4,46,41,000 (B)
(3) Rent of Government lands leased out for temporary cultivation	34,89,000
(4) District Board rate at 12½ per cent. of (A) ..	58,68,000
(5) Village Headman's cess at 5 per cent. of (B) ..	22,32,050
(6) Water rates [excluding Rs. 2,49,65,800 ¹ credited to the Irrigation Department from land revenue which has been included in (A) above]	4,06,19,900
Total ..	9,68,49,950

The average incidence of revenue works at Rs. 1-9 per acre. The incidence appears to be low but it has to be remembered that more than half of the Province is unirrigated and that the rates for barani land are much lower than those for irrigated lands. Some unirrigated land pays as little as 4 annas per acre whereas in the recent assessment in Lyallpur district the rate for good irrigated land was Rs. 6-6-10 for several tahsils.

¹This sum represents the increase in revenue which is received as a result of the construction of the canal system. The entire land revenue demand is credited to general revenues, in the first instance, and the share which is due to canal irrigation is calculated later on, and transferred to the Irrigation Department by book adjustment as indirect receipts, at the close of each financial year.

Rights.—The landlords or peasant-proprietors are the absolute owners of their land. They can do what they like with it and sublet freely; and they can sell or mortgage provided that they do so to a member of the same agricultural tribe or group. They are however prevented by the Land Alienation Act of 1901 from selling or mortgaging to non-agriculturists or persons of a different agricultural group or tribe without the sanction of the Deputy Commissioner.

Occupancy tenants are privileged tenants, but are in practice, in very much the same position as landholders. Occupancy rights have nothing to do with occupation for a certain length of time. The terms on which occupancy rights can be acquired are laid down in section 9 of the Punjab Tenancy Act of 1887. A tenant can also acquire occupancy rights by contract with the landholder. He may, for example, agree to sink a well at his own expense and the owner may in return grant him occupancy rights. The occupancy tenant pays in terms of land revenue, that is to say, he pays the land revenue plus a certain additional sum to the owner in recognition of the fact that the owner has a proprietary right. This is called *malikana*. The amount of *malikana* varies with the extent to which the occupancy tenant is privileged. The most privileged occupancy tenants might pay the land revenue plus 2 annas in the rupee; less privileged tenants, the land revenue plus 4 annas in the rupee and so on. The occupancy right is heritable and in the absence of legal heirs reverts to the landholder. Occupancy tenants have the right to make improvements, and they can sublet for a term not exceeding seven years. Such cases are not however common.

The tenants-at-will, who greatly outnumber the occupancy tenants, are tenants from year to year, and have no legal rights, whatever the length of their occupation. The great majority of them pay rent in kind (*batai*) and this generally amounts to half of the produce. On *chahi* land, i.e., land irrigated from wells, it is generally one-third of the produce and it may be less; but the usual practice is to pay half of the crop. The tenant-at-will has to bear the expenses of cultivation and to provide the plough and cattle, but his landlord sometimes provides half of the seed. He is thus very much the same as the *bargadar* in Bengal. The general view is that he is able to make a livelihood provided that he has a sufficient area to cultivate. In *barani* areas, it is estimated that 10 or 12 acres would be required to make a living, and in canal irrigated areas about half that area. But, as has been mentioned, many of the produce paying tenants-at-will also hold a small area as landholders. No proposal has ever been made to give this class of tenant any rights and it is considered desirable by the authorities that they should be left entirely to contract.

There is a third class of tenant in the colonisation areas, holding directly under Government. When a tenant is settled, he is allowed to acquire occupancy rights after the expiry of five years, provided that his behaviour had been satisfactory and that he has cultivated the land properly. Once he has obtained occupancy rights, he is permitted to acquire proprietary rights and become an owner, on payment to Government of a premium, which varies in the colony districts, but is now about Rs. 100 an acre.

In comparison with produce rents, cash rents are not common but where they are paid they generally amount to little less than half of the produce. In one village near Amritsar, there were cases of rents

as high as Rs. 100 per acre. These were being paid for the best lands which yielded three crops and which had good marketing facilities. During the boom period, rents of Rs. 30 per acre were not uncommon, and in comparatively recent settlement reports, rent of Rs. 14 or Rs. 15 are frequently found. At the present time, the level of rents might be taken at Rs. 10 to Rs. 12 per acre. This would represent about two-fifths of the gross value of the produce.

Transfer.—The Land Alienation Act was introduced in 1901 because it was found that land was passing to an increasing extent into the hands of non-agriculturists. The Act provides that the land cannot be transferred out of the possession of a particular agricultural tribe or group. The expression "agricultural tribe" does not in any sense signify backward communities, such as the aboriginal tribes in Bengal: it refers to the divisions of castes among the agricultural community and covers almost all the agriculturists in the Province. Land can only be transferred to a member of another tribe or group, or to a non-agriculturist with the permission of the Deputy Commissioner, and mortgages are limited to 20 years. The Financial Commissioner, Revenue, stated that many attempts have been made to defeat the provisions of the Act by benami transactions, sub-leases, and other subterfuges. There have been cases where *de facto* transfers have been concealed under the guise of exchanges. Good land might be exchanged for bad land, the difference in value representing the debt for which land would ordinarily be sold. Special tahsildars have now been appointed to trace such cases.

The Act has prevented transfers to non-agriculturists and has consequently led to a restriction of credit. Mortgage values have fallen to a quarter of the previous rate or even less. We were given to understand however by the Hon'ble Minister, Revenue, that it is Government's policy deliberately to restrict credit; and although the landholders, particularly the smaller landholders, may have to go through a difficult time, it is considered better that they should retain their lands rather than incur further debt. Land is the sole means of living of the Panjab peasant and he is strongly attached to the ownership of land.

Most of the officers whom our Commission met were of the opinion that the benefits derived from Government's policy of keeping the land with the landholders outweigh any other considerations. There is however another school of thought. The chief grounds on which the Act is criticised are that it has created a class of agricultural money-lenders, who are even more rapacious than the non-agricultural money-lenders, and that it has allowed the big landholders to buy up the small holders, who are the very men that stand in most need of protection. It is a fact that a class of agricultural money-lenders has grown up, and we were given to understand that considerable bitterness had developed. The critics of the Act complain that the large landholders are allowed to buy up the holdings of the small-holders whereas the non-agriculturists cannot obtain any land at all. They want to amend the Act so that the term "agriculturist" will become synonymous with the actual tiller of the soil, and the big landlords who do not themselves cultivate are removed from the list of agricultural tribes.

Sir Malcolm Darling, though not in favour of the repeal of the Act proposed that it should be amended in respect of the canal colonies. He wrote, "repeal is not practical politics, nor probably is it yet

desirable, but the moment has perhaps arrived to exclude the canal colonies from its operation. The canal colonist of to-day is a very different man from the helpless peasant of the past and it is difficult to believe that he still requires protection."

System of assessment.—The assessment of land revenue is made upon the land and not upon individual landholders. Every assessment is subject to the rule that it shall not exceed one-fourth of the estimated value of the net assets; secondly, that the rate assessed shall not exceed the rate imposed at the last settlement by more than one-fourth. The definition of net assets is as follows:—

The net assets of an estate mean "the average surplus which the estate may yield after deduction of the expenses of cultivation. A full fair rent paid by a tenant-at-will, though sometimes falling short of net assets, may generally in practice and for purposes of assessment be taken as a sufficiently near approximation to them on the land for which it is paid." The whole basis of assessment is thus the produce, and for purposes of assessment it is assumed that every landholder has sublet his land to a tenant who pays a share of the produce. The share of the produce which the tenant retains for himself is regarded as the cost of cultivation, and no detailed calculations are made for depreciation of cattle, cost of ploughing, harrowing, reaping, etc.

Assessment.—The system of assessment is as follows:—

The area under settlement is divided into assessment circles which comprise a number of villages more or less of the same character. The various classifications of land are then fixed within this circle and an estimate has to be prepared of what is called the matured area of each class. The matured area means the area sown, excluding the area on which crops have failed. In order to determine this area, the records are consulted over all the years following the previous settlement, and a period of 5 or 10 years is selected which is typical of the whole period. Crop experiments are then conducted in order to estimate the average yield of all the principal crops. By multiplying the yield and the matured area the total yield is obtained.

The next step is to value the produce. The rule is that the commutation price shall be the average price which is likely to be obtained by agriculturists for their crops during the coming settlement, but shall be based on the average of a sufficiently long period in the past; and it shall be assumed that the range of future prices will not be dissimilar. Prices prevailing in the years of famine or severe scarcity are excluded from the calculation. An allowance is also made for the cost of cartage to markets if in any village or group of villages it is found that most of the agriculturists take their produce to market towns. The Settlement Officer has thus to determine what have been the average prices in the past, and he must also have regard to the rates prevailing at the time of settlement. Generally, in determining the former, a long period is taken, such as the entire period since the last settlement was made; and in determining present prices enquiries are made from shopkeepers in selected villages, from harvest prices reported by Kanungos, from prices obtaining in markets, and harvest prices published in the Gazette.

When the commutation prices have been selected and approved, the total yield of each crop is multiplied by the commutation figure and the cash value obtained. This calculation is based, as has been explained, on rent in kind, and on the assumption that all land is sublet on the batai system. But before proceeding to calculate Government's share, a cross check is made by calculating on the basis of actual cash rents. In some districts cash rents are uncommon, but in districts where they are found to any appreciable extent, the procedure is first of all to exclude rents which are obviously too high or too low. For instance, a mortgagor might be realising an unduly high rent, and a relative of a landholder might have taken settlement at an unduly low rate. When the average cash rent per acre has been worked out, it is applied to the whole matured area and the total thus obtained is compared with the total obtained by the calculation on the basis of rent in kind. Generally there is some difference between the two, and the Settlement Officer then decides which of the two should be accepted, possibly with modifications, and proposes what should be the true assets.

Government's share is then to be calculated on the net assets. The net assets are obtained by first deducting from the gross assets the menials' expenses, i.e., payments of grain to village artisans; and from the resulting figure, half is deducted as the landlord's share. Various adjustments may then have to be made if the landholders supply part of the seed, or pay part of the water rate, or if the tenants pay part of the land revenue. The resulting figure represents the landholder's net assets and Government is entitled to claim one-fourth of this.

The following example taken from the Lyallpur Settlement Report, which was recently published, will show how the calculation is made. In this district, the tenants pay half the crop and half the land revenue; and the landholders pay half the water rate and supply half the cost of seed:—

	Lakhs.
Gross assets	227
Deduct menials' expenses at 9 per cent. ..	20
	<hr/>
	207
Deduct landlord's half share	103.5
Deduct water rate	9.3
	<hr/>
	94 (in round figures).
Add half land revenue, malikana and cesses ..	10
	<hr/>
	104
Deduct half cost of seed	4
	<hr/>
Landlord's net assets	100
Government's share at $\frac{1}{4}$	25

When the revenue for the assessment circle has been fixed, it is then distributed over the villages. The Settlement Officer has discretion to alter the rates if in any area a particular crop is inferior, or for any other good reasons; but the variation must not amount to more than 3 per cent. of the total revenue assessed on the circle. When the revenue has been assessed on each village, the rates may be readjusted according to the quality of each class of land, or in consultation with the landholders a flat rate may be introduced, irrespective of the classification of land. Alternatively, a flat rate may be applied to particular classes of land.

This is a feature of the Punjab system which is open to criticism. Once flat rates are adopted for the village, or for particular classes of land, it would seem that all the elaborate classifications of land and calculations of yield, etc., are rendered inoperative. Another feature which at first sight it is difficult to understand, is that the land revenue has not appreciably decreased since 1928, when the Government share was reduced from half to one-fourth. The reasons are two: firstly, the reduction was not to apply to current settlements; and secondly, although Government was entitled before 1928 to half of the net assets, it never took as much in practice, and Settlement Officers were rather concerned with keeping their figures on the low side. Nevertheless when re-settlements are carried out in all districts there will be some drop in revenue. Lyallpur, for instance, was last settled in 1906 with a revenue of 19.39 lakhs. In the recent settlement the cultivated area has slightly extended and the land revenue has been fixed on approved commutation prices at 25.08 lakhs. Previous to this settlement, remissions had been given which reduced the old land revenue to 15 lakhs, whereas after this settlement the revenue, though fixed at a higher figure, will actually be only 11.29 lakhs owing to the operation of the sliding scale.

Sliding scale.—Prior to 1937 when the sliding scale was introduced, *ad hoc* measures were adopted to grant remissions in order to meet the difficulties which the landholders were experiencing in the payment of revenue owing to low agricultural prices. The sliding scale adjusts the land revenue payable in any given year in relation to the prices current in the preceding year. As has been explained, the land revenue payment is fixed by multiplying the area, the estimated yield, and the sanctioned commutation price. This gives an index figure. The corresponding index figure is calculated for the year previous to that for which remissions are to be given, and unless there are exceptional reasons to the contrary, it is assumed that the percentage of each crop remains constant and that the average yield per acre is also constant. For instance, suppose that the area under deshi cotton is 7 per cent., the yield $6\frac{1}{2}$ maunds per acre and the sanctioned commutation price 200 annas per maund. Multiplying these figures, we get an index figure of 9100. Now supposing that the price of deshi cotton in the previous year was 100 annas per maund, then the index figure for the previous year would be 4550, and the remissions would be half of the assessed amount. The sliding scale operates downwards only. If prices rise, Government may get the benefit of them up to the sanctioned commutation figures, but even if they go above that level, Government cannot take anything more. The index price is calculated each year after enquiries have been made at all the leading markets.

It is difficult to lay down any precise relationship between the amounts paid by landholders to Government and the gross produce of the land. As a rough and ready rule, we might say that out of the gross produce, 10 per cent. is deducted for menials' wages, and the remaining 90 per cent. is divided between landlord and tenant, i.e., the landlord's share of the gross produce is 45 per cent. On this he has to pay one-fourth, plus $12\frac{1}{2}$ per cent. on the land revenue as District Board cess, and also 5 per cent. surcharge as cost of collection by the lambardar. Land revenue together with these two payments represents about 13 per cent. of the gross produce. In addition, abiana or water rate is payable in canal irrigated areas, i.e., in rather more than one-third of the Province. But the rates vary for different crops and custom varies regarding the proportion payable by landlord and tenant. In a district like Lyallpur where the custom is that landlords pay half the water rate, an addition of Re. 1-12 to Rs. 2 per acre might have to be made; but against this has to be set off half the land revenue which is customarily paid by the tenant. It is not possible to fix any one fraction which will represent the total Government dues as against the value of the gross produce. It can only be said as a general guide that a landowner pays about one-eighth of the gross produce. If the total demands from the land is divided by the cultivated area, the incidence per acre works out to Rs. 3-2. The tenants, the great majority of whom pay rent in kind, are paying half, or nearly half of the produce. There is also a small proportion of tenants who pay *chakota* or fixed produce rent, and who are the equivalent of the *dhankaravidar* in Bengal, though without his rights.

Remission and suspension.—Remission and suspension of revenue are allowable in the case of ordinary and extraordinary calamities. Ordinary calamities arise from the normal vicissitudes of season and relief in such cases is usually given in the shape of suspensions. The scale of suspension is as follows:—

	Per cent.
Where the crop is as much as 6 annas but less than 8 annas	25
Where the crop is as much as 4 annas but less than 6 annas	50
Where the crop is less than 4 annas	100

As a rule revenue which has been suspended is recovered whenever the return of better seasons permits it. The local officers consider at every harvest the circumstances of each estate in which there are balances of suspended revenue, and decide what portion can be recovered in addition to the demand of the current harvest.

Extraordinary calamities include accidental calamities which are not periodic, such as damage by locusts and hailstorms. In such cases relief is given in the shape of remissions. It has recently been decided to grant remissions on a field to field basis, as is done in the case of

abiana, and it is under consideration whether the scale of remission should be sanctioned as follows:—

	Per cent.
When the yield is more than 8 annas but less than 12 annas	25
When the yield is more than 4 annas but less than 8 annas	50
When the yield is less than 4 annas	100

Proposals for relief are made by local officers after each crop inspection, which begins on the 1st October for the autumn crop, and on the 1st March for the spring crop. Divisional Commissioners have full powers to grant suspensions. Remissions can be sanctioned by Deputy Commissioners up to Rs. 500 per harvest, by Commissioners up to Rs. 5,000 per district per harvest, and by the Financial Commissioner without limit. Suspended land revenue which cannot be recovered after the lapse of three harvests is considered for remission. Commissioners can sanction remission of such balances of suspended revenue up to Rs. 10,000 per district per harvest, and the Financial Commissioner can sanction remission without limit.

Under section 30 of the Punjab Tenancy Act, occupancy tenants are entitled to get suspension or remission of rent proportionate to the relief in land revenue allowed to their landlords. A tenant-at-will is entitled to similar relief provided that a Revenue Officer passes an order to that effect.

In the canal colonies there are no general rules for remission and suspension but all cases for remission of rent on Government land, i.e., on land held by tenants directly under Government are considered on their merits.

Recovery.—For the recovery of revenue, Government is armed with tremendous powers. The Land Revenue Act gives the revenue authorities power, after serving a writ of demand on the defaulter, to have him arrested and detained, if necessary, to sell his moveable property and crops, to transfer his holding to another person, to attach his holding, to sell up his holding, and to proceed against other immovable property. These drastic powers do not have to be frequently used, as the payment of land revenue to lambardars is extremely punctual. The average collections during the last five years have amounted to 99 per cent. of the recoverable demand.

For the recovery of arrears of rent by a landlord from his tenant, a suit has to be filed in the Revenue Court. In such cases the estimated yield of the Settlement Department is always an important factor. The yield is normally calculated on a lenient basis: consequently in an average season it is favourable to the tenant in a rent suit. Rent suits are generally dealt with summarily. We were told that decrees were often obtained within six weeks in the lower Court. There might be a longer delay if appeals are filed, but as a general proposition the recovery of rent in the Punjab is very swift and summary compared to the cumbrous procedure in the Bengal Civil Courts. Recovery can be made by distraint, attachment of crops, or the tenant may be ejected.

Consolidation of holdings.—The consolidation of holdings is regarded by the revenue authorities whom we met, as one of the most important measures for the welfare of the landowners. The law is that if two-thirds of the landholders in any village holding three-fourths of the total village area apply for consolidation, their application can be accepted. But in practice the consent of the entire body of landholders has been taken, after carrying out continuous propaganda, in order to avoid the possibility of party faction developing.

Consolidation was started by the Co-operative Department in 1926. The area consolidated up to date is 1.06 million acres. The cost of consolidation varies from year to year and is normally between Rs. 1-10 to Rs. 1-12 per acre. The tenants pay 8 annas to 10 annas per acre and payment is generally made in advance. The work is carried out by a staff of 134 Sub-Inspectors and 18 Inspectors. The time taken to complete consolidation in one village varies considerably with the size of the village but would normally be about 9 months.

At the same time consolidation is being carried out by the Revenue Department. It has up to date completed 52,000 acres of a rather higher cost than the Co-operative Department. The Revenue Department has been doing this work for the last two years. This experiment was considered necessary because the officers working under the Co-operative Department had not sufficient knowledge of revenue matters, and in some respects their work was considered by the Revenue Department to be defective. For instance, their maps do not show the relation between the old and the new plot numbers. A system which will cover the work of both departments is now being formulated.

The Commission saw during its visit to Jhelum several maps showing how plots which were originally scattered at a considerable distance had been brought together in one compact block. It is not always possible to replot the land in such a way that one landholder receives one block, because the fertility of the soil may vary considerably in different parts of the same village. When these conditions exist, the practice is to divide the village into two, three, or even four main blocks, according to the classification of the soil, and to allot a corresponding number of blocks to each landholder. The great advantage of consolidation in the Punjab is that by giving the landholder one compact block instead of a number of scattered plots, he is in a position to sink a well, which may give him 25 per cent. increase in the yield. It is true that the law of inheritance will operate in the future to subdivide the newly-created blocks but the new divisions will at least be contiguous and will not consist of small scattered fragments of land.

Before consolidation begins it is necessary to get the consent of the landowners and all the tenants with occupancy rights. Tenants-at-will are only consulted if they have been on the same land for 20 or 30 years. If a tenant is cultivating a plot which is transferred to another area, he moves with his landlord and cultivates a similar area in the newly-allotted block of land. In the case of mortgages, the mortgagors are persuaded to join the consolidation scheme, and are given an equivalent area in the newly-allotted block. If the new block contains land which is less fertile, a larger area may be given. We were told by the Assistant Registrar that in such cases it is not necessary to draw up a

fresh mortgage deed: all that need be done is to inform the Sub-Registrar (it is doubtful whether this would be permissible under the Indian Registration Act).

Maintenance.—Settlements previously took place at intervals of 20 years, but under recent legislation the interval has been extended to 40 years. After settlement is completed, the records are maintained by the Revenue staff. The organisation consists of Patwaris in the villages who are supervised by Kanungos; and above the Kanungos are Tahsildars and Naib-Tahsildars. The Patwari is in charge of an area of about 5,000 acres. His principal duty is to maintain the records, but he is also responsible for reporting crimes and the outbreak of diseases in the villages under his charge. There are three grades of Patwaris. Their pay varies between 20 to 26 rupees a month. When the settlement is finished, three copies of each village map are kept: one for office use, one in reserve, and one, printed on cloth, is kept by the Patwari. The Patwari also keeps a copy of the settlement record and the mutation register. When a transfer by sale takes place, the parties appear before the Naib-Tahsildar, and if the transfer is permissible under the Land Alienation Act, the mutation is allowed, and the Patwari is directed to correct the records accordingly. When mutations by inheritance occur, the Lambardar is bound to inform the Patwari of the mutation within one month, and if as the result of inheritance plots are subdivided, the map is corrected and the new division shown with dotted lines.

The Kanungos are generally in charge of 16 to 20 Patwaris. They are paid 40 to 50 rupees a month and are given a horse allowance of Rs. 15.

A new rent-roll is prepared before each harvest in which all transfers by mutation or inheritance are incorporated, and after the expiry of every four years a new jamabandi form is written out.

In addition to the maintenance of records, crop inspections are carried out at each harvest, and crop cutting experiments are made every year. These are carried out by Tahsildars and the Revenue Assistants. The Naib-Tahsildars in addition to supervising Kanungos inspect revenue work generally, help in the collection, and have third class powers as Magistrates. The Tahsildars have second class magisterial powers. When settlement operations begin, the Settlement Officer has at his disposal the village records, the map, and the results of crop inspections and crop cutting experiments. Although the records are maintained, settlement is necessary because the land revenue demand has to be reassessed, and it has been found in practice that maintenance is not always entirely satisfactory. In Settlement proceedings, two tahsils are normally taken up together and it usually takes four years to complete a whole district. The survey is based on plots supplied from the Survey Office, as in Bengal, and on this basis the Patwari makes a plane-table survey and prepares the khatians. The average cost of settlement during the last 10 years has been just over 2 lakhs per annum.

Owing to the economic depression, operations were greatly restricted from 1931 to 1934. The expenditure in the last 10 years has been:—

Year.	Rs.
1929-30	2,53,026
1930-31	1,31,961
1931-32	17,300
1932-33	5,576
1933-34	58,565
1934-35	1,17,846
1935-36	2,01,546
1936-37	3,16,681
1937-38	3,81,263
1938-39	5,53,433
Total	20,37,197

Punjab Land Revenue Committee.—The account of the revenue system in the Punjab may be concluded with a reference to the recommendations recently submitted by the Punjab Land Revenue Committee. The terms of reference were:—whether a practical scheme can be devised by which the principles of income-tax can be applied to the assessment of land revenue, and whether any other scheme can be recommended by which the land revenue system can be revised so as to give relief to small holders. The Committee came to the conclusion that it would be a practical impossibility to apply an agricultural income-tax to the Punjab, mainly because the great majority of landholders have small areas and keep no regular accounts. Even if the limit of exemption in terms of land revenue were fixed as low as Rs. 500, the number of assesses would only be 60,000 and the result would be a very serious fall in land revenue. As regards relief for small holders, the Committee discussed at some length the question of exempting uneconomic areas from land revenue and came to the conclusion that any such scheme would be impracticable. They point out that if exemption were allowed on the analogy that incomes below a certain limit are exempted from income-tax, all landholders who pay less than Rs. 500 as revenue would be exempted, and the revenue would be reduced from 4½ crores to 30 or 40 lakhs. Even if exemption were restricted to holders paying not more than Rs. 5 it would cost Rs. 32 lakhs. In a poor country like India, the amount of revenue which can be raised by “soaking the rich” is extremely small and that if a considerable sum has to be raised it can only be done by levying a small sum from as many people as possible. They mention that in France, exemption of holdings paying less than 10 Francs (the equivalent of about Rs. 5), was actually tried in 1898 and had to be abandoned as a failure. Another reason against exemption is that land has a monopoly value and it is reasonable that those who possess it should pay something to the community for a privilege which derives its existence from the community.

Although exemption might benefit a very large number of people, it would benefit most of them to an almost negligible extent. Nearly 20 per cent. of revenue payers in the Punjab own less than 1 acre of

cultivated land. If the limit of exemption were Rs. 5, 1½ million holders would benefit but most of them to the extent of less than Rs. 2. It is generally agreed that from the point of view of improving the standard of living, nothing less than 2 or 3 rupees a month would serve any practical purpose. Psychologically, exemption would at first be popular but the Committee thinks that the effect would soon pass, leaving a breach in the provincial budget and a feeling of discontent among those on the margin of exemption. Sooner or later, there would be strong political agitation to have the limit of exemption raised.

Another objection which the Committee envisages is the great increase in partitions, many of which would be fictitious. There would also be an increase in the number of uneconomic holdings, and this is regarded as a grave objection by the Committee which describes uneconomic holdings as the curse of Punjab agriculture. They approve in theory the suggestion that exemption should only be allowed if the holder's land (a) has been consolidated into a single field; (b) constitutes an economic holding; and (c) is declared impartible for ever. Exemption on these conditions would be in line with the policy followed in Germany and Denmark but the Committee thinks that in the Punjab there is no disposition to accept any restriction on the laws of inheritance and the proposal is not practical under present conditions. They recommended however that as a temporary expedient, landowners who themselves cultivate, but excluding those who have sublet, should be allowed relief on the following scale:—

Those paying up to Rs. 10	..	8 annas in the rupee.
Those paying over Rs. 10 but less than Rs. 25	..	Rs. 5 in lump.

They also proposed a surcharge on landowners paying more than Rs. 250 in land revenue:—

Those paying:—	Percentage of increase.
Rs. 250 but less than Rs. 500	.. 6½
Rs. 500 but less than Rs. 1,000	.. 12½
Rs. 1,000 but less than Rs. 5,000	.. 18½
Over Rs. 5,000	.. 25

Another important recommendation of the Committee is the creation of a small holders' development fund. They recommend that a sum of 5 crores, starting at 10 lakhs a year, should be set aside for the next 25 years from revenue receipts and should be spent on schemes calculated to increase the income of small owners and to provide them with amenities of life.

Agricultural development.—The Agricultural Department was started in 1905 and its research staff at the present time is larger than that of any Agricultural Department in India. The results achieved particularly in introducing improved varieties of crops have been remarkable. The staff now consists of 17 Imperial Agricultural Service or Punjab Agricultural Service, Class I Specialists; 18 Punjab Agricultural Service, Class II Research Officers, and 96 Agricultural Assistants working under these officers and assisted by the necessary

staff of plant observers, and labourers. As a result of the research work carried out in the last 35 years, there are at present millions of acres under improved varieties of wheat, cotton, sugarcane, rice and other crops; improved methods of cultivation have been introduced; improved implements are being used, and measures have been adopted to control insect pests and crop diseases.

The budget of the Department was 30 lakhs in 1930, but during the following period of financial stringency, it was curtailed to less than 19 lakhs. In recent years, it has regained lost ground and last year the total budget provision was 33½ lakhs while for the current year it amounts to 38½ lakhs.

The Province is divided into 7 circles, each with two or three Provincial Service Officers, under whom the Agricultural Assistants work in the villages. The Department aims at having a minimum of one Agricultural Assistant and two Makadams (corresponding roughly to the demonstrator in Bengal) for each tahsil. On the average, each assistant has 350 villages and each Makadam 175. The Makadam lays down demonstration plots on land given by owners for this purpose. He helps them with the supply of improved seeds, delivers lectures, and holds agricultural exhibitions. He also assists in the formation of village farmers' associations, which bind themselves to carry out the Department's recommendations. These associations are generally visited about once a month, and receive advice and supervision from the Makadam.

The Department has now distributed between 2½ to 3 lakhs of maunds of improved wheat seed, and 90,000 maunds of improved cotton seed. The Department purchases the seed from Government farms or from special grantees who are under contract to supply pure seeds. For experimental purposes, the Department has between 12 and 13 thousand acres of its own. Government pays for the cartage of the seed, and has commission agents for its sale all over the country. They consist of ordinary shopkeepers, who are paid 2 annas a maund for wheat seed, and 3 annas a maund for cotton seed. Wheat seed is sold by the commission agents at 2 annas a maund above the current market price, in order to ensure that the seed will not be used for food. The Director of Agriculture told us that the cultivators are only too glad to pay the extra cost for improved seed. The profit or loss made by the Department on these transactions depends on the price of seed. Last year there was a considerable loss, as no rise in prices took place between the harvest and sowing time. The loss was 1.51 lakhs, but when it is remembered that the improved seed covers about a million acres, the loss per acre is only about 2 annas. This year there has been a rise in price and the Department may make a profit. In 1938-39, the Department's income from the sale of seed and other sources was nearly 12 lakhs.

At Lyallpur, the Department has a farm of 1,100 acres from which the income in 1936-37 was Rs. 35 against an expenditure of Rs. 8.4 per acre. The cultivation is carried out on the half batai system. The gross income was Rs. 70 per acre of which the tenants got half. They provided the seed and cattle and paid Rs. 22 per acre for water rates, revenue and costs of cultivation. The profit was Rs. 13 per acre to the tenants.

Each of the 5 Deputy Directors of Agriculture has a 500-acre farm entirely for experimental work. On these farms the work is done

entirely by the Department's employees, and there are no tenants. There are also seed farms, which are cultivated by tenants, and district farms of 100 acres each, half the area of which is kept for experimental purposes, as the results obtained at the central farms might not be applicable to the entire area under the central farms. The remaining half of these farms is cultivated by tenants.

In order to encourage agriculture among the educated classes, Government has given several hundred squares to graduates and other educated people. In all, 89 grants of 50 acres each have been made, and 4 villages have been completely colonized by educated people who themselves carry on cultivation.

The introduction of American cotton is due entirely to the research work of the Department. Assuming that a cultivator gets the same outturn from American as from deshi cotton, he gets an increased price for the American variety which may amount to Rs. 12 per acre. The 3 lakhs of maunds of improved wheat seed supplied by the Department would sow half a million acres. The area of the Province covered by wheat is 10 million acres. Therefore, 5 per cent. is under improved seed. But if that seed is again used in the following year, the area under improved seed rapidly multiplies.

Cottage industries.—The principal subsidiary occupations for the spare time of the cultivators are: (i) fruit farming and fruit preservation, (ii) poultry keeping, (iii) bee keeping, and (iv) lac cultivation.

A great deal of work has been done to develop the fruit industry in the Punjab. There is a fruit specialist, and an assistant professor of horticulture, together with a large staff of gazetted and non-gazetted establishment who are employed on research schemes. This work is financed partly from the provincial revenue, and partly from the Imperial Council of Agricultural Research. Experimental fruit gardens have been established in different localities, and a number of fruit nurseries have been developed for the production and sale of reliable plants. Courses of instruction are given, varying in length from ten days to seven months, in all aspects of the fruit industry, both fruit growing and fruit preservation. The Commission saw this section at the Lyallpur Agricultural College. Various kinds of fruit drinks, such as lemon squash and mango squash, are manufactured and bottled. Tomato juice, tomato ketchup, and various preserves are manufactured, all at a very low cost. All the processes which are taught in this section of the college can be carried out without capital outlay by a cultivator in his home, with the exception of canning, for which a machine has to be purchased at a cost of Rs. 100.

In regard to poultry keeping, Government has established a Central Poultry Farm with subsidiary farms in the districts. Research work is being carried out to improve the indigenous fowl, and courses of instruction in poultry keeping are regularly given.

Two bee-keeping stations have been opened by Government in the hills and courses of instruction are given annually.

Industrial development.—The annual budget of the Industrial Department is 21 lakhs. The Director of Industries has five circles under him, one for each division, under the supervision of Assistant Superintendents. The principal objects of the Department are to give people education in technical subjects, and to help them in the marketing of their products. Government has established an institution for

research work connected with the hand-loom industry, the manufacture of hosiery, etc., and has experts who give advice to the manufacturers. There are also peripatetic demonstration parties which tour the districts and give courses of training. The subjects in which training is given are: refining of oil, cloth printing, manufacture of castor oil, fibre industries, weaving, spinning, carding, smithy, glue making, rope making, pottery, dyeing, soap making, etc.

Under the State Aid of Industries Act, the Department also allows loans to enterprising persons to help them in starting small industrial concerns, and guarantees $3\frac{1}{2}$ per cent. for the first five years. Government has an annual budget of 2 lakhs for this purpose.

There is also a provision of 2 lakhs annually for helping persons who have manufactured useful articles which they are unable to exploit through lack of funds. The Director of Industries instanced the case of a man who had manufactured a new type of sewing machine, and had been granted a lump sum for further research work. This kind of grant is non-refundable.

The primary object of the Department is to develop all small scale industries. The textile industry is the biggest industry in the Province, but as hand-woven cloth cannot compete with cloth produced by the mills, the Department is teaching the weavers how to print designs on cloth, and how to produce woollens and tweeds. In order to keep the cultivators engaged in their spare time, the Department has introduced sericulture and is teaching the cultivators how to carry on silk reeling. The manufacture of castor oil from seeds has also been introduced.

The Department has three schemes for providing marketing facilities. The first is for products of the hand-loom industry: this is financed by the Government of India. The second, also financed by the Government of India, is for the marketing of the products of small wool workers. The third is the general marketing scheme which is financed by the Punjab Government.

The Department regards as the criterion of success or failure the number of villages in which small industrial concerns have been started. For this reason the policy is to keep demonstration parties at one centre for at least a year, or possibly for two years. At each centre, batches of students are given a six months' course. The Director of Industries is of opinion that these parties have generally been successful in getting small industrial concerns started.

Co-operative movement and debt.—The extent of indebtedness in the Punjab was estimated by Sir Malcolm Darling to be 120 crores on account of landowners' debt in 1930 or $22\frac{1}{2}$ times the land revenue. He considered that only 17 per cent. of the landholders are not in debt, and that the average debt per landowner was about Rs. 600 in 1930. The total agricultural debt was estimated in that year at 140 crores. Debt is almost as widespread amongst the tenants as among the landowners, but on a smaller scale, averaging Rs. 150 to Rs. 160 per family. It is probably equal to at least a year's gross income in the case of the tenants, and in the case of proprietors to 5 or 6 years' net income from their land. Normally, the interest payable on the agricultural debt

would be 15 crores. The four main reasons for borrowing are given as:—

- (i) the small size of holdings and the way in which they are subdivided;
- (ii) recurring loss of cattle;
- (iii) ingrained improvidence; and
- (iv) extravagant expenditure on marriage and other domestic ceremonies.

The co-operative movement has now 17,017 rural societies and the membership is said to be increasing. The total number of members of agricultural societies is $5\frac{1}{4}$ lakhs which represents about 11 per cent. of the total number of agricultural families in the Province. Last year 106 lakhs of rupees were advanced by the societies to their members, and 62 lakhs were advanced by Central Banks and Banking Unions. The total advances outstanding with societies amount to '6.20 crores. The Co-operative Department has experienced the same difficulties as has Bengal owing to the economic depression. 1,400 societies are now in process of liquidation, because they have repaid nothing to the Central Banks. The Debtors' Protection Act has prevented creditors from selling up land or attaching crops, except cotton, and the items of moveable property which are also exempted from attachment are so numerous that it is practically impossible for money-lenders to realise anything through Courts nowadays. There is in fact a moratorium. Advances are made to members on the surety of two other persons. This is necessary because of the provisions of the Land Alienation Act. It is only when the loan exceeds Rs. 2,000 that land can be taken as collateral security.

Loans are allowed for some objects which at first sight appear a little unusual, such as the payment of land revenue and trade. Loans are allowed for land revenue because the revenue has to be paid by the end of January and landowners often wait for a rise in the price of cotton before selling. Such loans have to be repaid within six months. Loans are given for trade because some agriculturists purchase cattle in large quantities and sell them on the frontier. The policy of the Department is now to devote 75 per cent. of the loans to short-term credit for the purchase of cattle, seeds, and for payment of land revenue, and 25 per cent. to other loans.

Debt Settlement Boards.—Debt Conciliation Boards were started with the object of reducing agricultural indebtedness, and by March 1937, 5 Boards had been established. Their success induced Government to extend the experiment and to set up a Board in each of the remaining districts, where no Board had yet been constituted. Twenty-three more Debt Conciliation Boards have been set up since 1937. One of the principal differences between the Punjab and the Bengal system is that the Chairman of these Boards are paid Rs. 200 each a month.

and the members Rs. 150. The cost of maintaining these during the last five years has been as follows:—

Year.	No. of Boards.	Expendi- ture. Rs.
1935-36	4	19,634
1936-37	5	55,311
1937-38	11	59,827
1938-39	27	1,63,432
1939-40	29	1,87,079 (for 9 months).

The only fee charged from the parties is 8 annas per claim irrespective of the amount. The average monthly number of cases settled comes to 25 per Board. Up to March 1937, the debts claimed and conciliated were as follows:—

Claimed	..	..	39.43 lakhs
Conciliated	..	..	14.28 lakhs
Reduction effected	..	..	46 per cent.

In the case of debts secured by mortgage, the reduction effected was 23 per cent. on a total debt of 9.12 lakhs. Twenty per cent. of the conciliated debt was settled by payment of cash and the sale of land and cattle. Sir Malcolm Darling observed that the success of a Board depends largely on the extent to which it can settle debts by the transfer of some tangible assets, as this avoids payment by instalments, which is most uncertain because it gives the creditor no special remedy in the case of default. He concluded that most of the debtors were more or less insolvent, and that fact probably explained in part the large reductions effected, because the money-lender knew that in such cases he was unlikely to do any better by going to Court.

Debts to banks and co-operative societies are excluded from the operation of Debt Conciliation Boards. Land revenue is also excluded but not rent. No distinction is made between debts incurred for agricultural and social reasons, but trade debts are excluded. We were told by the Chairman of a Debt Conciliation Board at Jhelum that credit has been practically extinguished. He considered that the co-operative movement is generally unpopular because of its strictness in recovering advances, and because in barani areas, where the success of crops is often uncertain, it is difficult to make regular repayment. The movement is however more successful in areas which are canal irrigated. The interest payable by members to rural societies varies from 9½ to 12½ per cent. and although money-lenders usually take anything from 20 to 40 per cent. the people generally prefer to go to them because they are more accommodating.

The restriction of credit which has followed the Relief of Indebtedness Act of 1934, the Debtors' Protection Act of 1936 and the establishment of Debt Conciliation Boards has been reflected in a marked degree in receipts from stamps. During the ten years from 1928 to 1937, the average income from stamps was Rs. 1.13 crores. In 1937-38, the income was 1.02, 1938-39—96 lakhs and up to July 1939-40, it is as little as 10 lakhs.

Rural reconstruction.—Reference has been made to the remarkable progress which rural reconstruction has made in parts of the Punjab. Mr. Brayne, who is responsible for the organisation of this work, informed us that his policy has been based on home life in the villages. The home is the unit of family life on which the whole social structure is built, and it is therefore important to start with the home, and in particular to get the women interested in the movement as well as the men. The men, he said, might approve of the reconstruction movement, but were often too lazy to carry it out because it involves extra work.

The results of Mr. Brayne's propaganda were apparent in the remarkable improvements which had been effected in the standard of living, and in the obvious pride of ownership. In the villages where the movement has taken hold, almost every house had a good ventilator, a chimney had been built to prevent smoke from disfiguring the walls of the house, bathrooms equipped with hand pumps had been built outside the houses, and the cattle were housed in well-built, and well-ventilated sheds. The women occupied their spare time by ginning cotton, and weaving carpets, mats, cloths, and other articles for household use. In every house there was cleanliness and orderliness, and many of the householders had taken great pains over the decoration of their walls. Rural reconstruction was one of the most impressive features of social development which the Commission saw in the Punjab.

One suggestion which Mr. Brayne made is that any officer in charge of rural reconstruction should have the status of an Additional Member of the Board of Revenue. It is essential that he should have the necessary authority behind him, and duplication of work is avoided if his office is part of a departmental office.

Conclusions.—Though prior to British rule half the gross crop was taken as revenue, the proportion has gradually been brought down, and now the share is theoretically one-fourth of the net assets, or 12½ per cent. of the produce where the tenant-at-will pay half of the crop. It may be less in the areas irrigated by wells, where the tenants pay one-third of the crop, or as a result of restrictions on the limit of enhancement of revenue. At the same time, the reduced share of one-fourth of the net assets is only in force in the districts which have been resettled after 1928: elsewhere it is theoretically one-half.

The average revenue per acre is Rs. 1-9, but with water rate the average in the canal irrigated area is about Rs. 5 which is more than the average rent in Bengal. Without some form of irrigation, wells or canals, hardly any crops worth growing can be obtained.

The Punjab peasant proprietor seems to be more prosperous than most of the settled raiyats in Bengal. This may be partly because all their houses are in one compact block for which they pay no rent. In Bengal many cultivators have over an acre of homestead land for which they pay a higher rate than for the best lands under cultivation. Another reason is the large sum which is annually paid by Government in the shape of military pensions. We were told in Jhelum, which is one of the main recruiting districts for the army, that the amount paid in pensions annually is about 14 lakhs. The total amount paid in pensions in 1928-29 was 1·39 crore.

The cultivators have stronger bullocks, but these bullocks have to lift water from wells as well as draw the plough. One pair of bullocks

is considered enough for 12½ acres of land. The price of a pair of bullocks is about Rs. 80. According to the statistical figures of 1924-25, the number of cattle in Bengal is 18 millions as against 7 millions in the Punjab. On the other hand there are three times as many buffaloes in the Punjab as in Bengal (3 millions in the Punjab and nearly 1 million in Bengal), 2 million more sheep and goats, and 10 times as many horses, mules, donkeys, etc.

The cultivators may be able to make more subsidiary income from milk, forest produce, straw, etc., but they have no bamboos which are so plentiful in every Bengal village and which are so universally used for every purpose. On the other hand the profit from the sale of milk may not be so great as is supposed. The milk of buffaloes is preferred because they give a greater yield, and because cows are kept primarily for the supply of bullocks for ploughing. The Punjab Board of Economic Enquiry has published a number of family budgets. The report for 1936-37 shows that the profit of several families from the sale of milk in different districts amounted on the average to only Rs. 8, excluding the milk consumed by the family. It has also to be remembered that the average Punjab cultivator grows fodder for his cattle, and that the area covered by fodder crops may be as much as 20 per cent.

Their food may be more nutritious than rice but they cannot get fish so easily, and they have no cocoanuts or jack fruit.

Owing to irrigation their rabi crops give a better yield, but their main crops are not more valuable than the main crops of Bengal. They have no betel; neither cotton nor wheat yields as much per acre as jute; the percentage of land under sugarcane is not very much greater; and all the other crops are less valuable than paddy. They may use more manure on the fields, but rice grows better without manure than the Punjab crops.

Seeing that the Punjab Government passed an Act nearly 40 years ago to check alienation of agriculturists' land to non-agriculturists, it is strange that they have settled such large blocks of canal land with the highest bidder whether he was a capitalist or not.

The restrictions on transferability have been invaluable in preventing the land passing out of the hands of the original peasant owners. Where it has proved defective it was because of the insuperable difficulty of defining a *bona fide* agriculturist in any legal measure.

The tenants-at-will who cultivate nearly half the area of the Punjab do not consider the system hard. But they must possess at least 10 acres to be able to make a livelihood out of half the crop, less water rates and the cost of cultivation. It is not generally believed that the share system causes bad cultivation, though in the United Provinces it is admitted that occupancy raiyats cultivate more intensively, and make more improvements than statutory tenants who may be turned out at any time.

The consolidation of holdings which has taken place is praised by all officers and has increased the gross outturn of crops and profits of agriculture. Whether it would do as much good in Bengal is doubtful. The height and fertility of paddy growing lands in a Bengal village

varies more than the level of wheat-growing lands in one and the same Punjab village, so the cultivators of paddy lands would be more suspicious of proposals for exchange. When his lands have to be irrigated from wells made at his own cost, it is obviously far more to the advantage of the Punjab peasant to have all his lands in a compact block. No consideration need necessarily be paid to the wishes of the tenants-at-will in framing consolidation proposals. If he does not like moving to new lands with his master, the incoming master can always turn him out. In Bengal, except in villages where there is one landlord and very little subinfeudation, consolidation would be much more difficult.

APPENDIX VIII.

The Tour of the Land Revenue Commission, Bengal, in the United Provinces.

Itinerary.—The Commission spent eleven days in the United Provinces. On the 1st and 2nd December they met the Settlement Commissioner, Revenue Secretary, the Adviser to the Governor (Revenue), the Debt Legislation Officer, the Assistant Director of Land Records, a senior officer of the Irrigation Department, the Registrar of Co-operative Societies and the Deputy Secretary and Deputy Director of the Agricultural Department. On December the 3rd, the Commission travelled to Aligarh and on the 4th visited three villages in that district and met the Collector, the Assistant Settlement Officer and the Deputy Director of Agriculture. On December the 5th, the Commission travelled to Agra and met the Personal Assistant to the Commissioner and two non-official gentlemen, and on the 6th it visited two villages in Agra district. On the 7th it moved to Jhansi and visited one village in the afternoon. On the following morning, it met the Records Officer and two non-officials, and in the afternoon inspected one village accompanied by the Settlement Officer. On the 9th it travelled to Benares. On the 10th it met the Senior Member, Board of Revenue, and on the following morning visited two villages, and returned to Calcutta by the evening train.

Agricultural conditions.—The general standard of living among the agriculturists in the United Provinces appeared to us to be distinctly lower than that of the Punjab. The villagers are poorer in physique, and the villages have not the same air of orderliness or of prosperity which we saw in the Punjab. The village sites are compact and the houses are built of mud, generally with thatched roofs. In Jhansi, which is much more akin to Central India, the houses are very different. The walls are built of mud and are extremely low, and the roofs are made of tiles baked from mud. Many of the villages which were visited were dirty, and in a rather dilapidated condition. We commonly saw walls that were crumbling to bits, and roofs which stood badly in need of rethatching. There was no attempt in the average village to ventilate the houses or to carry out any sanitary improvements. One model village which we saw in Benares district was distinctly better, but not up to the standard of the best Punjab villages.

Some of the cattle-sheds are well built but the standard is not so high as in the Punjab. The cattle in the north-west are of a good size and have to do more work than the cattle in Bengal, owing to the general system of raising water from wells by bullocks. In Jhansi, however, the cattle are much smaller and about the same size as those in Bengal.

Land and crops.—The productivity of the soil depends entirely on the water-supply. Irrigation from canals is not so extensive as in the Punjab, covering 3 million acres or 9 per cent. of the cultivated area as compared with 38 per cent. in the Punjab. Elsewhere, irrigation is carried out from wells. The water is raised in a large leather bag by a rope pulled by cattle, and carried down runnels on to the fields. This involves a great deal of labour, and we were told that the cattle often work the whole day simply in raising water. In one day the maximum that can be watered is $1\frac{1}{2}$ bighas. Each field

gets 3 waterings in the dry season when rabi crops are growing, but if water and labour were available to water 6 times, the villagers admit that the crops would be better. Persian wheels are also used, but not to the same extent as in the Punjab.

The principal crops are wheat, sugarcane, millet, oil seeds, gram and pulses. Cotton is also grown though not as extensively as in the Punjab. There are two main harvests: the kharif and the rabi—but cultivating conditions vary very greatly in different parts of the Province. As many as four crops are taken off the best land in the same year, whereas in the unfertile areas it may only be possible to sow one crop every second year.

In general, cultivators do not sit idle to the same extent as they do in Bengal. The Registrar of Co-operative Societies estimated that on the average cultivators sit idle for three months, and the Department has a programme for the development of cottage industries in order to occupy their spare time.

The value of crops per acre differs very greatly with the fertility of the soil in different parts of the district. In fertile and well irrigated districts like Gorakpur and Meerut, the value of the produce might be Rs. 50 per acre. The Senior Member, Board of Revenue, told us of experiments which have been made over an area of three acres in a fertile and well irrigated area. The value of the yield was Rs. 55 per acre. On the other hand, the yield in parts of the Bundelkhand area would be hardly as much as Rs. 20 per acre. The Banking Enquiry Committee estimated yields of between Rs. 78 and Rs. 27 when high prices ruled. According to present prices, the value would be about 60 per cent. of those obtaining at the time when the Banking Committee held their enquiries. The Revenue Department estimates that the average value per acre may be taken at about Rs. 32.

Sugarcane has become a profitable crop owing to the control of prices which is exercised by the United Provinces Government in conjunction with the Bihar Government. The minimum price this year has been fixed at annas 8-9 per maund of cane. The average yield is about 500 maunds per acre so that the gross value is about Rs. 275. The costs of cultivation are estimated at Rs. 125 so that the net profit this year is Rs. 150.

Irrigation.—The Government's system of irrigation consists partly of irrigation by canals and partly from hydro-electric tube-wells. The capital outlay on productive and unproductive works up to the end of 1938-39 was Rs. 25,93,44,766 and Rs. 3,68,11,077 respectively. The figures for productive works include expenditure on hydro-electric and tube-well schemes. The average working expenses during the last three years, including establishment, maintenance, and depreciation were Rs. 1,07,68,864, and the average payment for interest on loans amounted to Rs. 1,09,51,220. The productive works yielded an average profit of Rs. 94,63,370, while the unproductive works involved a loss of Rs. 48,14,451. The average net gain was thus Rs. 46,48,919. There is no sinking fund and interest is paid out of the general revenues.

The water rate is realised at varying rates according to the crop irrigated, under the same system as in the Punjab. Thus the rate for sugarcane might be Rs. 7 to Rs. 8 per acre; wheat Rs. 2-8 or Rs. 3, and so on. It is impossible to strike a general average for water rates, but we were told that Rs. 3-8 per acre might be taken as a rough guide.

The hydro-electric scheme was also financed by raising loans. There are now 1,500 tube-wells each of which can serve two or three villages. There are also 300 private wells and in all there are 2,200 sub-stations in rural areas. Each well is capable of irrigating 120 acres of sugarcane, 60 acres of kharif crop and 250 acres of rabi crop. The power is worked for six months in the year and during the remaining six months when there is no demand for water, it lies idle. The area irrigated last year by this system was about 900 square miles. The average cost of a well is about 4,000 rupees.

It is entirely at the option of landholders whether or not they take water from the canals or tube-wells. As in the Punjab the water rate is an occupier's tax, i.e., it has to be paid by the tenant where land has been sublet.

Land revenue system.—As in the Punjab, the State is considered in the United Provinces to be the supreme owner of land and to be entitled to a share of the produce. That share is ordinarily 40 per cent. of the proprietor's assets. Previously it was two-thirds of the assets until 1855; half from 1855 to 1895 and between 48 to 45 per cent. from 1895 to 1925. The present rate of 40 per cent. is not always taken in practice. The condition of the estate and the number of co-sharer proprietors are taken into consideration, and the revenue may in a few cases be as little as 25 per cent. But 40 per cent. is the legal maximum and the proportion of revenue to recorded rents works out at that figure. The revenue is 7.11 crores and the recorded assets 17.66 crores. The incidence of revenue is 2:1 rupees per acre in the temporarily-settled area, but since the economic depression began, remissions have been allowed both to proprietors and tenants with the result that the incidence of revenue per acre has fallen to 1.7 rupees.

In the permanently-settled area, which is situated in Benares division and part of Azamgarh district and which covers one-tenth of the area of the Province, the incidence of revenue is Rs. 1.5 per acre. The revenue amounts to 45.11 lakhs and the total rental demand is 111.04 lakhs. Excluding the proprietors' khas land, the incidence of revenue in the permanently-settled area comes to 40 per cent. of the assets. The Senior Member, Board of Revenue, told us that there is little difference between the incidence of revenue in temporarily and permanently-settled areas. Including the proprietors' khas land in the permanently-settled area, the incidence of revenue would be about 35 per cent. of the assets.

The majority of proprietors hold small estates. There are 12½ lakhs of revenue payers in the United Provinces as compared with 12 million cultivators. The area under cultivation is 35 million acres so that the average area in the possession of a proprietor is rather less than 30 acres.

Of the 12½ lakhs of revenue payers, 11 lakhs pay less than Rs. 100 a year and account for one-fourth of the revenue. 1.17 lakhs pay between Rs. 100 and Rs. 1,000 and account for half the revenue; and 8,000 pay more than Rs. 1,000 and account for the remaining one-fourth. It is believed that more than half of the proprietors pay less than Rs. 24 as revenue. Proprietors' own cultivation amounts to about 19 per cent., but the very small proprietors also cultivate each other's land as tenants; and as a result of extreme subdivision of shares in some cases, there are proprietors who are worse off than tenants. The majority of the revenue, therefore, is paid by proprietors who

themselves cultivate not at all or very little; but the vast majority of proprietors are themselves cultivators. The present revenue demand is 640 lakhs. Roughly, one-sixth of the revenue demand prior to 1931 has been remitted on account of the slump in prices.

In the permanently-settled area, there is very little sub-infeudation in comparison with Bengal. There are only a few permanent tenure-holders in Balia district who hold at an average rent of Rs. 2-8 per acre. Nearly one-third of the tenanted area is possessed by tenants holding at fixed rates of rent. Their holdings are transferable, as in Bengal, and they can sublet without restriction at any rate of rent. Their rights are considered more valuable even than proprietary rights, as is clear from the fact that the sale price is higher for mokrari rights than for proprietary rights. The average rate of rent for fixed-rate tenants in Benares division is Rs. 4 per acre which probably represents the rent paid at the time of the permanent settlement. Occupancy tenants pay at Rs. 4-8 on the average and statutory tenants at Rs. 6-6. The rents of sub-tenants are considerably higher.

In the temporarily-settled area, the revenue prior to 1929 was assessed at intervals of 30 years but since that date the period has been extended to 40 years. But in alluvial estates, and in areas like Bundelkhand where cultivation is precarious, Government may sanction shorter terms. In the Bundelkhand area, the rule is that revision may take place after five years if the area of established cultivation has varied by more than 10 per cent. The assessment can be revised in individual cases in any year if established cultivation has decreased by more than 15 per cent.

The revenue is collected, as in the Punjab, through Lambardars who are appointed to represent some or all of the proprietors in mahals where there is more than one proprietor. But the system is said to be breaking down in parts of the Province, and direct collection from proprietors is increasing. Revenue is paid at the tahsil offices.

Method of assessment.—The assessment of revenue is based upon the assets, consisting of rents received from the tenants, produce received from the proprietors' khas land, and siwai, which corresponds to *sayer* income in Bengal and includes collections from fisheries, grazing land, etc. The procedure is very elaborate. After the maps have been brought up-to-date, or a re-survey has been made when many corrections are necessary, and the records have been corrected and attested, the Settlement Officer proceeds to classify the soil according to its productive value in every village. There may be 4, 5 or 6 classes of soil, and each class is given a figure to represent its comparative value with other classes. For instance, if the average good land of the village is shown as 100, the best land round homesteads may be 120, second class land may be 75 and so on. The Settlement Officer then picks out those holdings which lie entirely within one classification of soil, with the object of finding out what is the fair average rent paid for that class. He excludes any rents which are obviously unfairly high, or too low, and examines generally the pitch of rents since the last period of settlement. When he has decided what is the fair average rent for each class of land, he is in a position to commence the actual assessment.

Prior to 1938, the Settlement Officer had no power to reduce rents of his own motion. Now he can reduce rents which are inequitable, but he can only enhance rents which are too low on the application of

the landlord, subject to a limit of 25 per cent. Rents may, therefore, be altered when a revisional operation takes place, but until the next operation takes place the rent of any khas land that is settled is governed by contract. In fixing fair rates of rent for each class of land, the Settlement Officer also takes into consideration the prevailing level of agricultural prices and the rise in rentals as well as the average level of cash rents. He may commute grain rents into cash rents, and many such commutations were made when high prices prevailed. In areas where rents are largely paid in kind, he may determine circle grain rates. When the rates have been determined, the Settlement Officer has to apply as a general check the standard of one-fifth of the estimated gross produce, and under the present rules, the resulting rent should not exceed this proportion. It seems however that in practice rates do exceed one-fifth of the produce. In Aligarh and Agra, we found that the average rates were Rs. 9 and Rs. 8 respectively. The average value of the produce in Aligarh was stated by the Collector to be about Rs. 35 per acre and in Agra it could hardly be said that the average would be as high as Rs. 40. Probably therefore the general level of rent is often nearer one-fourth of the gross produce than one-fifth. It might be one-fifth in the case of occupancy tenants, who pay father less than statutory tenants.

In calculating the assets of proprietors' khas land, a concession is made for land which they themselves cultivate, ranging from 15 to 30 per cent. The normal deduction is 25 per cent. A deduction is also made on account of improvements. The siwai income is added, and the total assets are thus obtained. Revenue is then normally fixed at 40 per cent. But in cases where the number of proprietors in the same mahal is large or their circumstances are poor, a lower percentage, not usually less than 30 per cent. may be taken. Any enhancement of revenue is limited to one-third of the previous demand, except in a mahal where the previous demand, if increased by one-third, would amount to less than 30 per cent. of the assets.

Rights of tenants.—There are two principal classes of tenants: occupancy and statutory. About 48 per cent. of the tenantry have occupancy rights and 44 per cent. have statutory rights.

The right of occupancy was created by the Tenancy Act of 1859 by which tenants who had cultivated lands continuously for 12 years were given heritable, but not transferable rights in that land. The same principle was maintained in the Tenancy Act of 1926. Occupancy tenants under this Act are either those who had already acquired rights under the old Act or tenants on whom the landlord might in future confer such rights.

Statutory rights were first created by the Oudh Rent Act of 1886. Statutory tenants were then entitled to retain their holdings without disturbance or enhancement for seven years, but the Rent Act of 1921 gave all statutory tenants the right to retain their holdings for life, and their heirs were allowed to hold on for five years after their predecessors' death.

There are also exproprietary tenants who are occupancy tenants of a particular class. If a proprietor transfers his land otherwise than by gift or exchange, he is allowed to acquire a right of occupancy at a favourable rate of rent in the land which he formerly cultivated himself.

Sub-tenants are tenants holding under any of these three classes of tenants. They hold from year to year, and are tenants-at-will, paying rates which approximate to half the value of the produce.

The incidence of rent varies greatly from district to district according to the fertility of the soil. In Aligarh, the average rate of rent for all classes of tenants is Rs. 9-4 per acre whereas in unfertile areas like Jhansi, the average rent for occupancy tenants is Rs. 2-8 per acre, and in Lalitpur subdivision where cultivation is precarious, it is as low as Rs. 1-8.

The average incidence of rent is as follows:—

Class of tenant.	Agra.		Oudh.	
	Rs. a.		Rs. a.	
Occupancy	5 0	3 10	
Statutory	8 0	8 0	
Ex-proprietary	5 8	5 11	

The incidence for all classes of tenants, including the permanently-settled area, is Rs. 6 per acre.

The new United Provinces Tenancy Act, which has recently received the Governor's assent, creates a new class of tenants called hereditary tenants. This new class includes all tenants who are not fixed rate tenants, exproprietary tenants or occupancy tenants. In other words all statutory tenants and their heirs will have a heritable right in their holdings. Enhancement of rent is limited to an increase of 25 per cent., subject to a provision in the new Act that the rent shall not be less than three-fourths of the valuation at the appropriate rate fixed according to the settlement classification.

All holdings of tenants are non-transferable with the exception, as previously mentioned, of fixed rate tenants in the permanently-settled area.

A rise or fall in the price of agricultural produce is not a ground for enhancement or reduction of rent.

There are also restrictions on subletting. Under the new Act, exproprietary, occupancy, and hereditary tenants in Agra are allowed to sublet for five years and can only sublet again after the expiry of three years. The same law applies in Oudh with the exception of certain tenants holding under special terms, and occupancy tenants. Non-occupancy tenants may sublet for a period of one year only, and may sublet again after an interval of one year. Tenants of *sir* land and sub-tenants have no right to sublet. The penalty for illegal subletting by any class of tenant is ejectment.

Ejectment.—The law regarding ejectment has been substantially altered by the new Act. Previously non-payment of rent was a ground for ejectment, as was illegal subletting illegal transfer.

Under the new Act, a proprietor after obtaining a decree for arrears of rent from the Revenue Court, files the application for ejectment between the 1st of June and the 31st of August. If the claim is admitted by the defaulting tenants, the Tahsildar orders him to pay the arrear into Court by the end of May next following the expiry of

one year from the date of his order. Until the expiry of this period or until the arrears are paid up, the defaulter has also to deposit in Court the rent of the current agricultural year by the end of May of that year. If he does not comply, he is immediately ejected. If he contests the claim, he is ordered to pay into Court the rent of each agricultural year by the end of May, and the case proceeds as an arrear of rent case. The effect of the new law is, therefore, that once a tenant gets into arrears, he cannot hold for more than one year unless he pays his rent in full.

The new Act also provides that a tenant may be ejected if he does any act detrimental to the holding, unless he repairs the damage or pays compensation within three months.

Area of holding.—The average size of a holding in the United Provinces varies greatly with the fertility of the soil. In the Gorakhpur division which is fertile and intensively cultivated, the average area is 4·8 acres, whereas in Jhansi division where the soil is unfertile, it is just over 12 acres. The average area for the Province is 6 acres.

In 1931, the holdings in two tahsils of Agra district were classified with the following results:—

		Per cent.
Less than 2½ acres	...	27·3
Between 2½ and 4½ acres	...	23·3
5 to 10 acres	...	28·9
10 to 17½ acres	...	14·3
Over 17½ acres	...	6·2

The average size of a cultivating zamindar's holding was 10 acres and of a tenant 6·18 acres.

The Collector of Aligarh gave us the following approximate figures:—

	Rs. a.	Rs. a.
Value of gross produce per acre	..	35 0
Deduct average rent for all classes of tenants	..	9 0
Deduct average water rate in canal irrigated areas	..	3 8
Deduct estimated cost of cultivation	..	10 0
		<hr/> 22 8
Net profit per acre	..	12 8

Taking a general view of the rights of tenants in the United Provinces and the value of their produce, it is evident that the occupancy raiyat in Bengal is far better off than the occupancy tenant in the United Provinces. The latter has only heritable rights—he cannot transfer and his right of subletting is restricted. He was until recently liable to ejectment for non-payment of rent, and to distrain. The new Act has modified this but he is still liable to deposit the rent annually during the course of proceedings in the Revenue Court. His average rate of rent approximates to the average rent paid by under-raiyats in Bengal and is nearly double the average paid by our occupancy raiyats.

Recovery of: (a) Revenue.—Land revenue is paid in two instalments after the kharif and rabi harvests. All the proprietors of a mahal jointly and severally are liable for the revenue, and the revenue is realised direct from the co-sharers or through the Lambardar who is a co-sharer appointed by the Collector with the consent of other co-sharers to represent the whole body of proprietors. For this the Lambardar receives a fee of 5 per cent. on the land revenue from the other co-sharers.

Government is armed with wide powers for the realisation of arrears of revenue. Defaulters may be arrested and detained, their movable property attached and sold either in part or whole; the share of a co-sharer defaulter may be transferred to a solvent co-sharer; the settlement may be annulled for a share or for the whole mahal; the whole mahal, or a specific share may be sold; and other immovable property of the defaulter may be sold.

Recovery of revenue in the United Provinces is almost cent. per cent. This may be due to the stringent powers which Government may exercise, but at the same time there is very little default in the payment of revenue. The same is true of rent, though in a lesser degree. Compared to Bengal, there is very little default in the payment of rent. This again may be due to the fact that until the new Tenancy Act was recently given assent, the landholders had wide powers of realisation by distraint, or by ejectment. Some of the revenue officials whom we met were of opinion that the provisions of the new Act in respect of recovery of arrears may be difficult to carry out in practice and may prove to be undesirable because they may lead to less punctual realisation of rent.

(b) Rent.—The produce of every holding is deemed to be hypothecated for the rent, and until that claim has been satisfied, no other claim on the produce, except for arrears of revenue and the like, can be enforced by any Civil or Revenue Court. The dates and instalments for payment of rent are fixed and any amount which is not paid by the due date becomes an arrear.

Previous to the new Act arrears were recovered: (i) by distraint and sale of the produce of the holding; (ii) by suit; (iii) by application to the Tahsildar for the issue of a notice calling upon the tenant to pay his arrears, in default of which he could be ejected.

The provisions under the new Act are:—(i) distraint has been abolished; (ii) a decree obtained in the Revenue Court may be executed by the sale of the whole or a portion of the holding; (iii) if a decree for arrears has not been satisfied in full within one year of the order, the tenant may be ejected from a portion of his holding, the rent of which does not exceed one-sixth of the amount of a decree; (iv) the Court may lease the holding for a maximum period of six years to another person who pays the decretal amount. The last provision is an innovation which merits attention.

Rents can be realised direct by the Collector in cases where an estate is attached for failure to pay the land revenue. This provision is similar to that of section 99 of the Cess Act. The new Act also provides that if there is a general refusal to pay rent, or canal dues in any area, Government may declare that arrears of rent or of canal dues may be recovered as arrears of land revenue. This does not mean that the Collector sells the immoveable properties, but he sells moveables.

All rents are recoverable through Revenue Courts and decrees are usually obtained within two or three months. There is a salutary provision that not more than three adjournments may be given and that cases must be disposed of within six months.

Remission.—Reference has already been made to remissions of revenue and rent on account of the slump in prices since 1930. In addition to this form of remission, revenue and rent may be remitted or suspended when agricultural calamities take place.

The general principle is that no relief is ordinarily required when there is half the normal crop. Suspension is ordinarily allowed only in the case of a calamity affecting the kharif, which consists largely of food crops, although remission may also be sanctioned if the calamity is exceptionally severe or if there has been a previous crop failure.

Both remissions and suspensions of revenue and rent require the sanction of Government, but pending receipt of Government orders Commissioners are empowered to suspend realisation of rent and revenue.

When an agricultural calamity, such as drought, frost, hail, floods, etc., takes place, an estimate of the damage is made by the Kanungo and by the Tahsildar under the supervision of the Collector. When the calamity is widespread, an estimate of the loss is prepared for each village as a whole; and when only part of a village is damaged, the portion affected is marked off on the village map and a detailed estimate of the loss prepared. The estimated damage is made in annas per rupee and is entered in the remarks column of the Patwari's field book. The scale of relief is as follows:—

Loss in annas per rupee.	Relief given in rent.
	Annas.
Amounting to 8 annas but less than 10 annas ...	6
Amounting to 10 annas but less than 12 annas ...	10
Amounting to 12 annas or more ...	16

In Bundelkhand and other areas where agriculture is precarious, relief in rent to the extent of 4 annas in the rupee is given when the loss of normal produce is between 6 to 8 annas.

The above method of calculating rents for the purpose of estimating remissions and suspensions was introduced about a year ago and is based on the provisions of the United Provinces Rent and Revenue Relief Act. Prior to the passing of this Act, relief was granted under the Agra Tenancy Act and the Oudh Rent Act.

Consolidation of holdings.—Consolidation work was started in 1925 by the Co-operative Department in Saharanpur district. There was at first opposition, but this was subsequently overcome by propaganda, and consolidation was taken up in 8 other districts. Up-to-date 40,000 acres have been consolidated. Since 1937, Government has made an annual grant of Rs. 12,500 and with the help of this amount 21 Supervisors and one Inspector have been put solely on this work. The number of consolidation societies is now 147.

The work of the Co-operative Department has paved the way for legislation and the Consolidation of Holdings Act, which has recently

been passed, will come into force early next year. In the meanwhile, a number of Naib-Tahsildars are being trained in consolidation work and rules under the Act are being framed. The work will now be carried out by the Revenue Department. Operation can be started in any village on the application of tenants who cultivate at least one-third of the village. In the Punjab, the practice has been to take the consent of all the proprietors before commencing operations although the law requires that only two-thirds need apply, and that the area in their possession is three-fourths of the village. The Registrar, Co-operative Societies, was of opinion that the Punjab Act should have been followed in this respect, and thinks it possible that by limiting the area to one-third of the village, party faction may ensue.

Maintenance of records.—The system of maintaining records is very similar to that in force in the Punjab. This work is under the supervision of the Director of Land Records, while revisional settlements are under the charge of the Settlement Commissioner. As in the Punjab, the village official is the Patwari who is in charge of three or four villages covering an area of about 5,000 acres. Above the Patwaris are Kanungos of different grades. The Kanungo immediately above the Patwari is in charge of a circle containing normally 12 Patwaris.

The Tahsildars do criminal work, as in the Punjab, in addition to their revenue work and they are not included in the cost of maintenance. The Patwaris are only paid Rs. 13 to Rs. 16 a month and the budget provision for their salary is Rs. 46 lakhs. The total cost of maintenance, including supervision, is about Rs. 60 lakhs, representing 10 per cent. of the existing revenue. When transfers of proprietary interests take place, the transferee has to report the change, otherwise he has no legal status. The Patwari reports the transfer and makes the mutation after receiving the order of the Tahsildar. In cases of transfer by occupancy tenants, the Patwari is not empowered to make the mutation. He has to report to the Kanungo who orders the mutation to be made. It is only in the case of transfer by statutory tenants (now hereditary tenants) that mutations can be made direct by the Patwari. The Patwari goes round the villages under his charge three times a year and notes the area cultivated, crops grown, and any changes in possession. The map is simultaneously corrected in red ink. We were told by the Additional Director of Land Records that the system of maintenance is fairly successful, but not entirely so, and that the map and record have to be revised before revenue is assessed at revisional operations.

Maintenance is also carried out in the permanently-settled area. This is necessary because applications for decrees for arrears of rent and ejectment cases go before the Revenue Courts. It is, therefore, essential to know who is in possession.

Both in the temporarily and permanently-settled areas the cost of maintenance is paid by Government from general revenues and no part of it is recovered from the landlords or tenants.

Agricultural improvements.—The total budget of the Agricultural Department is 80.24 lakhs. Of this, the Department's budget proper is 26½ lakhs; 11.78 lakhs are allotted for improvements and 40.3 lakhs for rural development. The Agricultural Department maintains a College at Cawnpore, and two schools. There is a Research branch which is occupied with experiments in sugarcane, cotton, oil-seeds,

pulses, fruit and crop pests, agricultural chemistry, soils, manures, etc. There is also an engineering section, the main functions of which are the boring of masonry wells, construction of tube-wells, and design and manufacture of improved agricultural implements. In addition, there are sections for the development of horticulture and gardens, and for cattle breeding. There is also a marketing section which until recently has been occupied with carrying on surveys for the marketing of agricultural commodities, but recently work has been started on the actual development of marketing.

In order to carry the results of research to the cultivator, a rural development organisation has been established. There is a Rural Development Officer who has an assistant under him for each division, and in each district there is an association of non-officials with an executive committee consisting of three members, one of whom must be a Deputy Collector. The executive committee co-ordinates all rural development activities in the district. Under each Rural Development assistant, there are 15 or 16 centres, each covering an area of 25 to 30 villages. Each of these centres has a seed store in charge of a Supervisor. There are at present about 600 seed stores in the Province to serve about 20,000 villages. The Supervisor is responsible for agricultural improvements in the villages attached to his seed store. He has under him three kamdars who arrange demonstrations on cultivators' fields and distribute seeds for sowing in compact blocks. The cultivator to whom the seed is issued has to enter into an agreement that he will sell the product to the Department, if so required, and that he will carry out departmental instructions in raising the crop. A portion of the produce from the improved seed is purchased by the Department and stored for distribution in the following year. The store also stocks improved implements, and sells, or loans them to the cultivators for use on an experimental basis. The object is to multiply the improved seed locally until the deshi and inferior varieties have been entirely replaced. A part of the rural development fund is also used for hospitals and dispensaries. The Director of the Agricultural Department told us that when 48 more dispensaries have been opened, medical service will be available to every village within a radius of four miles. Maternity centres have also been opened and the training of *daïs* has been started.

A great development in the veterinary service is under contemplation. It is proposed to open 250 cattle breeding centres under the supervision of trained stockmen. These centres will be inspected by the District Board Assistant Veterinary Surgeons.

Cottage industries.—The development of cottage industries has received special attention during the last two years. The budget allotment for this work is 2.40 lakhs. Two polytechnic institutes have been opened for training in village arts and crafts, and one of the conditions of training is that the applicant settles down in a rural area and follows the craft in which he has been trained. Peripatetic demonstration parties have also been organised. The principal objects are to develop:—

- (1) The handloom industry—with this object a number of stores have been opened which are managed on co-operative lines and which will supply raw materials and new designs to the weavers.
- (2) Training in improved processes of manufacture of gur.

- (3) Improved methods of curing leather.
- (4) Improvement of handspun or handwoven cloth.
- (5) Development of the woollen industry through co-operative societies, and stores which will organise and control production.
- (6) Improvement of handmade paper.

Some progress has been made in providing for the marketing of goods produced by these cottage industries; but Government propose to establish a chain of 140 stores in rural areas and 10 central stores at divisional headquarters for the marketing of cottage goods.

Co-operative movement.—In the United Provinces, the Co-operative Department seems to have made the same mistake in the past as has Bengal, and it is in very much the same position. The Director told us that at the beginning of the movement the work of organisation was not carried out on sound lines. From 1904 to 1924 the expansion was too rapid and was not based on a solid foundation. When the slump came, many societies went into liquidation. Since 1932 the policy of the Department has been one of cautious expansion. There was also no distinction previously between short-term and long-term credit, and as in Bengal, liability was joint and unlimited. It is now under consideration whether the principle of joint liability should be abandoned and that of limited liability substituted. The number of rural societies covers only 5 to 6 per cent. of the rural population.

In spite of past mistakes and the present economic situation, the Department seems to have been able to collect its dues with more regularity than in Bengal. Last year 41 lakhs was advanced and collection amounted to 80 per cent. Funds come mainly from the Central Banks whose capital is derived from deposits, but there are also some societies whose funds are derived from deposits.

Rural credit has become greatly restricted in the United Provinces, as elsewhere. The Registrar told us that mahajans now advance money only to old and trusted clients and to their own tenants. They will also probably restrict advances to agricultural objects.

One of the features in the United Provinces which seemed to us most unusual is that so much rural credit has been given on what seems to be such insufficient security. Holdings in the United Provinces are not transferable, and therefore no security can be had from the land. The only security is the crop, and this is hypothecated first to the payment of rent. Security will be still further restricted by the United Provinces Debt Redemption Bill which provides that only one-fourth of the produce can be attached. Possibly one explanation is that nearly half of the agricultural debt is owned by tenants to their landlords. In 1934 the total agricultural debt amounted to 101 crores which was distributed as follows:—

			Per cent.
To village money-lenders	...	...	6
To town money-lenders	...	...	33
To landlords	...	...	46
To cultivators	...	...	15

In cases where tenants have borrowed money from their landlords it is possible that the debt may be recovered along with rent.

The following is a brief account of the legislation connected with debt:—

The Encumbered Estates Act was passed to assist indebted proprietors and the period for filing applications recently expired. 34,000 applications were filed involving a sum of 25½ crores. These were investigated by Special Judges who reduced the rates of interest and declared what is the fair debt. The Collector then works out the value of the property and fixes instalments according to the landlords' ability to pay. These are collected along with the land revenue, and the money-lender is given a bond.

Up to the present no legislation has been passed for scaling down the debts of tenants, and there are no Debt Conciliation Boards but the following Bills were recently introduced in the Legislature.

(i) *The United Provinces Agriculturists' and Workmen's Debt Redemption Bill*.—The object of this Bill is that debt should be reduced to a level at which it may be possible for debts to be paid off without ruining the agriculturists. The rates of interest will be drastically reduced, especially in the case of small tenants. It will also apply to landlords paying less than Rs. 1,000 as land revenue, and will protect part of their property from sale in execution of a decree. It also provides that not more than one-fourth of the cultivator's crop can be attached at any harvest in execution of a decree.

(ii) *The United Provinces Money-lenders' Bill*.—This provides for the registration and licensing of professional money-lenders. Only licensed money-lenders will be allowed to apply to the Court for recovery of their dues.

(iii) *Regulation of Agricultural Credit Bill*.—This Bill provides that no decree can be executed against agricultural produce after four years have expired from the date of the decree. Secondly that the land of proprietors paying less than Rs. 250 as revenue is protected and cannot be sold in execution of a decree unless the Court is satisfied that the sale will not be adverse to the debtor's interests (this seems to give very wide discretion to the Court).

(iv) *Land which is protected against the execution of a decree cannot be permanently alienated without the Collector's permission*.—This provision is based on a similar provision in the Bundelkhand Alienation of Land Act which prohibits transfer in that area to non-agriculturists. There is one important distinction between that Act and the Bill, in that the Bill makes no distinction between agricultural and non-agricultural classes.

In addition to the above three Bills, a fourth Bill is under consideration. The chief provisions of which are—

- (a) to amend section 60, Civil Procedure Code, in order to exempt from attachment and sale of further property of agriculturists;
- (b) to amend the Usurious Loans Act by reduction in the rate of interest; and
- (c) to provide a simple procedure for the redemption of mortgages.

The economic depression, coupled with the restriction of credit and the proposed legislation, has resulted in a decrease in the income from stamps as is apparent from the following figures:—

Years.	Actuals in thousands.	
	Rs.	
1929-30	...	1,80,65
1930-31	...	1,69,68
1931-32	...	1,65,96
1932-33	...	1,85,44
1933-34	...	1,74,97
1934-35	...	1,60,47
1935-36	...	1,49,70
1936-37	...	1,62,59
1937-38	...	1,37,89
1938-39	...	1,28,36

Conclusions.—Our general impression was that on the average the condition of the agricultural classes in Bengal is better than in the United Provinces. The villages which we visited appeared to us to be rather more dilapidated than the average Bengal village and indicative of a lower standard of living.

The most noticeable feature of agriculture in the United Provinces is that no crop will grow without irrigation and that a great deal of labour has to be expended in raising water from wells, which have to be sunk at the expense or by the labour of the tenants. No better crops are grown by irrigation in the United Provinces than in the areas of Bengal which are sufficiently irrigated by rainfall. It is difficult to give any figure for the average outturn of crops per acre, but the estimate given to us by the Revenue Department was Rs. 32. This is practically the same as the figure of Rs. 31-2 given in the Government of India Statistics. The value of the produce is therefore less than the average figure in Bengal and much less than that of the fertile portions of Eastern and Northern Bengal.

The average rent of all classes of tenants for the Province is Rs. 6 per acre, which is nearly double of the average rate for occupancy raiyats in Bengal.

Legislation has given greater rights to the occupancy raiyats in Bengal than to the occupancy tenants in the United Provinces. The latter have only heritable rights. They cannot transfer their rights, subletting is restricted, and until very recently they were liable to ejectment for non-payment of rent, and to distraint. Ejectment has recently been abolished, but occupancy tenants are still liable to deposit annually the rent of each agricultural year during the course of proceedings in the Revenue Courts.

From an economic point of view, there is not much difference between conditions in the two provinces. The average area in the possession of a United Provinces family is 6 acres, as against roughly $4\frac{1}{2}$ acres in Bengal; but the average value of the produce is less in the United Provinces. They have the same problem of small uneconomic holdings, and the proportion of tenants who hold less than $4\frac{1}{2}$ acres is not very much smaller than in Bengal.

On the other hand, the United Provinces Government has done more for their tenants than has the Bengal Government, by supplying irrigation facilities and seed stores, and by adopting a vigorous programme of rural improvement. The United Provinces also has the advantage that it does not suffer from the problem of over-population and pressure on the land to quite the same extent as does Bengal. The incidence of agricultural population is 640 per square mile of the net cultivated area, compared with 739 in Bengal; but on the other hand the value of the produce is appreciably less. The average cultivator in Bengal is unwilling to leave his land or his village, whereas in the United Provinces the people frequently emigrate and find work in other provinces.

Introduction to Statistics (Appendix IX)

By

Sir F. A. Sachse, C.S.I., C.I.E.

The agricultural statistics in this appendix were collected with the idea of helping the Commission to estimate the profits from agriculture in Bengal in comparison with other provinces and countries, where farming is chiefly in the hands of peasant-proprietors with small holdings.

Any estimate of the net income of the agricultural families in any country must depend on the following factors:—

- I. Total area growing crops.
- II. Average yield of each crop.
- III. The selling value of the produce.
- IV. The cost of cultivation.
- V. The other expenses of the cultivator including the minimum cost of his food and clothing.
- VI. The subsidiary sources of income, e.g., dairy produce, fishing, carting, and casual labour.

But figures for the average income of 4 million families, which include say 10 per cent. of families with 20 to 50 acres and perhaps 30 per cent. of families with less than one acre of land on a cash rent, can hardly yield useful results. It is for this reason that the American economists who have published voluminous statistics about farming in China, have preferred to give figures for the median farm, i.e., the midmost value when the values are arranged in order of magnitude, or for the mode, i.e., the variant which occurs with the greatest frequency.

The Indian Taxation Committee's report quotes the Government of Bombay to the following effect:—

“For a full comparison between provinces of the incidence of revenue or rent, it would theoretically be necessary to exhibit, how the net produce is divided between tenant, landlord and State and this would have to be done for various standards of net produce per acre for every province.”

The Commission could not in any case have attempted a task of this magnitude, but they might have tried to give figures for the net income of families with from 12 to 7 acres, and with between 7 and 3 acres, leaving out of account those with exceptionally large areas

and those whose holdings obviously could not support them¹. But the settlement records do not give the number of families with more than 12 acres of land, with between 12 and 7 acres, etc., and the material was not available to the Commission for deciding what proportion of the agricultural families in the Province are in enjoyment of an economic holding or a typical holding².

The appendices in all Settlement reports give the average area of interests, whereas many families in all parts of Bengal hold several interests in different rights or under different landlords. There was a difficulty even in deciding the total number of agricultural families³, because the census classifications are not the same as the Tenancy Act classifications. Many of the people returned as rent receivers have lands under their own cultivation, and there is reason to believe that many of the people recorded as agricultural labourers (whose numbers have gone up disproportionately since the last Census) are in possession of no inconsiderable part of the cultivated land as bargadars. It was, therefore, difficult to put forward with certainty any figures for the total number of agricultural families and the average area of cultivated land held by them, much more for the number of families having an economic holding. Further as pointed out by the Banking Enquiry Committee of the United Provinces, the economic holding is vastly different in different parts of a province and in fact in every village. It depends on the nature of the crops grown and the proportion which bears two crops. It also depends on the size of the family, the cost of cultivation, the facilities for marketing, and many other factors which are peculiar to the particular

¹Major J. C. Jack in his "Economic Life of a Bengal District" divided the families into four classes—

- (a) Those in comfort (49½ per cent.).
- (b) Those below comfort (28½ per cent.).
- (c) Those above want (18 per cent.).
- (d) Those in want (4 per cent.).

• The classification was made with reference to their estimated incomes, not the area of their land. Though the amount of land possessed by a family is not the only criterion of its economic condition, it is the most useful, provided families with more than 7 or 10 members are counted as two.

The Settlement Report of Mymensingh estimated families—

- With more than 12 acres—4 per cent.
- With an average of 5 acres—36 per cent.
- With an average of 2 acres—60 per cent.

²See United Provinces Banking Enquiry Committee Report, paragraph 60.

³According to the Census of 1931 there are 50·84 lakhs of cultivating owners and 8·26 lakhs of cultivating tenants. Both these figures relate to earners and working dependants. The Census tables do not give the total population under each sub-class or group. At 1½ earners per family there would be 4·2 million families of cultivators excluding rent-receivers and agricultural labourers. If the whole of the cultivated land (29 million acres) is held by these families the average per family would be more than 7 acres. This is a much higher figure than has been arrived at in the enquiries conducted by the Board of Economic Enquiry and the Settlement Department. It, therefore, appears that a considerable part of the 29 million acres under cultivation are in possession of agricultural labourers, and that they ought to have been recorded as cultivating tenants, if the enumerators had followed their instructions to record as a tenant any person who was entitled to remain in possession of his land during the season in which crops sown and tendered by him were in the ground. This certainly applied to all bargadars.

cultivator. A holding of $2\frac{1}{2}$ acres might be an economic holding in Tippera, whereas in Birbhum no family with less than 7 acres might be able to support itself on the produce.

The difficulties of arriving at conclusions which would be generally acceptable on the various factors enumerated above will now be noted on in more detail. The difficulty, however, which more than any other has deterred the Commission from including in the report any precise estimate of the net income of any class of families in Bengal is the difficulty of deciding of what particular period or year the prices should be adopted in calculating the value of the crops¹. When the statistics were collected, the price of jute had been less than Rs. 5 for several years, and the price of paddy was about Re. 1-12. When the report was being prepared the price of jute was Rs. 13 and the price of paddy had gone up to Rs. 2-4. Every two rupees per maund added to the price of jute, and of eight annas added to the price of paddy, would together increase the total value of the crops of the Province by 31 crores. The result would be an increase in the figure given in Table VIII (a) for the average value per acre (Rs. 54) and the average value per head of the population (Rs. 40) by more than 20 per cent.

I. AREA UNDER EACH CROP.

Table I gives the total area available for cultivation, the cultivated area, and the area growing two or more crops. These figures have been taken from the appendices of the Settlement reports which are now ready for all districts. Though some of these reports are more than 30 years old, and cultivation may have extended to some extent and some crops may have taken the place of others, we are certain that they provide the most accurate material that can be obtained until a general revision of the record-of-rights takes place.

II. YIELD OF CROPS.

Table II (a), (b), etc., give district by district for each of the common crops the yields from which the provincial yield of paddy has been worked out at 18·8 maunds per acre and the value of the total produce at 143·3 crores.

In these Tables only the Settlement Officer's estimates and the figures from one crop cutting quinquennial report have been referred to specifically. Actually, however, various other sources of information have been taken into consideration. In view of the vital bearing the figures for yield have on the economic position of the cultivator, it may be useful to discuss all the sources in some detail. It will be convenient to study the figures indicated by each source in connection with paddy, for which as the staple crop of Bengal most information is available.

¹M. L. Darling in "Wisdom and Waste in the Punjab Village" uses the material supplied by the accounts of farms published by the Board of Economic Enquiry to show that the net income per acre was Rs. 28-15 in 1929-30 and Rs. 13-4 in 1933. "The fall in prices would appear to have made it impossible for the one-plough holding, a matter of 6 or 7 acres in the case of well-irrigated land, and 12 or 13 acres in the case of canal land to meet anything beyond the barest necessities of a family, and it is doubtful if it can do even this."

SOURCE (I).

The crop cutting experiments reported by the Directors of Agriculture of the different provinces are printed in the Quinquennial Reports of the Government of India. The report for 1932-37 gave the average for 10 years of aman rice as $12\frac{1}{2}$ maunds and of aus rice as $11\frac{1}{2}$ maunds. It pointed out that the yields of all important crops had decreased in the period as compared with previous periods, hence these experiments indicate that 19 maunds of paddy was the minimum average for two decades at least.

Prima facie these estimates should be reliable. But the area of which the harvest was weighed represents only an insignificant proportion of the area growing the main crops and there have been hardly any cuttings for the subsidiary crops. Between 1932 and 1937 there were only 4,105 cuttings of paddy representing, at 1/10th of an acre a time, only one experiment each year in 250,000 of the fields growing this crop.

The officers who do the cuttings are supposed to choose fields which are typical of the crops of that particular year, neither obviously below the average nor above it. This dependence on the discretion and powers of observation of individual officers has distinct elements of danger, and it is on this account that Professors Bowley and Robertson recommended to the Government of India that a system of random selection should be insisted upon. The only really satisfactory solution, however, would be to make the experiments cover a substantial percentage of the area under each crop.

Another difficulty is that the cultivators can easily vitiate results by concealing a portion of the produce either before the cutting is done or before the dried produce is weighed.

On the other hand there is room for suspicion that the crop cutting experiments do not take sufficient account of fields growing no crop in a particular year, because there are no experiments for which a result of "nil" is shown. Some of our own members have contended that two annas or more in the rupee should be deducted from the yields—

- (1) on account of years in which many fields only give an 8-anna crop or less;
- (2) on account of fields lying completely bare of crop.

The answer to the former point is that in a bad year the fields selected must all be below the average of normal years, and that the results of bad years, as of good years, are reflected in the averages derived from crop cutting experiments.

The answer to the second point is that as the statistics are prepared with the idea of ascertaining the total yield of all crops, we cannot include in the area fields which were not planted with that crop. Such fields were recorded as fallow in the settlement operations. It is true that in a particular year an unusually large or an unusually small number of plots normally growing paddy may have been shown as fallow. But we can assume that such discrepancies counterbalance each other.

Except in a few areas particularly liable to flood or drought, it is extremely rare in Bengal that any fields sown or transplanted do not produce any crop at all and could be mistaken by the officers for fallow plots.

The main objection, however, to accepting the figures in the official statistics without adjustment is the internal evidence, which the figures themselves provide, of their unreliability. Owing to discrepancies between results of different quinquennial periods the Director of Agriculture himself found it necessary to equate low averages to their proper level. For the period 1932-37 Bankura had the highest yield of aman paddy of any Bengal district, viz., 21.74 maunds though in one of those years there was a total failure of crop. This means that in the other four years there must have been an average outturn of 25 maunds. If this figure of 21.74 is correct, the average in Dacca cannot possibly be 17, Noakhali 14.34, Rajshahi 15 maunds. Similarly, with aus paddy, Hooghly, Bankura, Murshidabad, where rain is rare in the ploughing months of March and April, are shown as having higher yields than Noakhali, Tippera, Rajshahi and Jalpaiguri. It is an almost universally accepted proposition that Bengal is a fertile country and that the crops of eastern Bengal are far superior to the crops of those districts in western Bengal, where the rainfall is much less certain. It appears, therefore, that the results of crop cutting experiments do not sufficiently reflect the difference of fertility between eastern and western Bengal or between Bengal and other provinces.

SOURCE (II).

In addition to the crop cutting reports the Government of India publishes annually forecasts of the principal crops. These are based on estimates of the area actually under cultivation each year and of the yield, expressed as percentages of the normal areas and yields. These are modified from time to time in relation to the latest crop cutting experiments. The area is then multiplied by the yields to give the estimated total outturn of each crop.

The average outturn for the 20 years ending 1935-36 is 338 million maunds for an average acreage of 20.8 million acres. This would give an average of 15.9 maunds. If we adopt the settlement area, the total yield of the Province would be 410 million maunds on the same yield basis. It has been shown below that 500 million maunds is the amount required.

SOURCE (III) CROP CUTTING EXPERIMENTS CONDUCTED ON IMPROVED SYSTEMS.

The reliability of the yields resulting from crop cutting experiments usually conducted are discussed in Sir John Hubback's Bulletin "Sampling for rice yield in Bihar and Orissa". In 1924 and 1925 he conducted about 10,000 experiments on a new system which he believed to be correct within one maund in about 95 per cent. of cases. In Table (I) he has shown that in Santhal Parganas out of 2,211 cuttings, 339 fields yielded less than 6 maunds of paddy; 1,417 yielded from 6 to 7 maunds; 338 yielded from 17 to 21 maunds and 109 yielded between 21 and 31.

Experiments on this system have been continued on a large scale in connection with revisional settlements by the Settlement Officers of Orissa since this time. (Paragraph 192 of 1922 Settlement Report.) Mr. Dalziel's report shows that random sampling in Cuttack resulted

in an average of 23½ maunds for irrigated and 23 maunds for unirrigated lands as opposed to 14 maunds 21 seers and 15 maunds 28 seers respectively according to the old settlement system of crop cutting experiments.

Balasore Sadar subdivision gave 13·21 according to the old type methods, and 17·22 by the revised methods.

As regards Ganjam in Madras, now transferred to Orissa, Sir George Paddison in 1909 expressed the opinion that the experiments made in 1878 were 19 per cent. to 25 per cent. below the mark. If he was right, the yield from irrigated land was 21·3 and from unirrigated 12·70.

All this material, from which only a few selections have been taken, indicates the difficulty of arriving at any general average even for one district, but it does give support to the view that—

- (1) Crop cutting experiments on the random system show higher yields than on the old system.
- (2) There is not much difference between lands irrigated artificially and lands sufficiently watered by nature.

In Bengal also in recent years there have been various attempts to make crop cutting experiments on a more scientific system. In connection with a proposal to undertake an irrigation scheme for the improvement of the lands in Burdwan, Hooghly, Howrah, between the Banka river on the north and the Ulubaria Canal on the south, about 94,000 cuttings were made. They show that low sali accounts for 26 per cent. medium sali 40 per cent. and high sali 17 per cent. The average yields were: Burdwan 19 maunds; Hooghly 18½ maunds; Howrah 18 maunds. If the Suna lands, which are not really suitable for rice and of which no cuttings were made, are included with an assumed crop yield of 6 maunds per acre, the average would work out at 16·4 maunds. But it must be remembered that these cuttings were all taken in a strip of country where the crops are notoriously bad and a flushing scheme is under contemplation.

SOURCE (IV) ESTIMATES OF SETTLEMENT OFFICERS.

As stated in paragraph 162 of the Report, the estimates of Settlement Officers work out at about 19 maunds for the Province as a whole. Their reliability depends to some extent on the personal equation, some Settlement Officers having been more cautious than others. But they are based on the enquiries of numerous Kanungos and Assistant Settlement Officers who have worked in the fields of each subdivision for a continuous period of 8 months in two successive years. In some districts there have been revisional record-of-rights and the reports of previous Settlement Officers can be and are, taken into account in these estimates.

SOURCE (V) REPORTS OF SPECIAL COMMITTEES AND OFFICERS.

The Paddy Enquiry Committee of 1938 did not commit itself to any estimate of yield for the whole Province. It was content with giving a resumé of the evidence it received in certain districts. Eighteen maunds an acre is the yield stated for most of the districts.

The Report of the Congress Committee has been referred to in the Report, in paragraph 164. They found that the yield in the Damodar Canal area before Government spent one crore of rupees on this irrigation scheme was 24 maunds an acre, and that it had only been damaged by drought to the extent of 8 annas of the crop once in five years. The Director of Land Records in his proceedings¹ under Act XVI of 1935, which were conducted with the object of enabling Government to determine what the water rate should be, reported that the yield of medium sali (80 per cent. of all rice growing lands) was 17 maunds in the better villages and 14.5 maunds in the inferior villages, before the canal water was supplied.

The enquiries made in Jessore prior to the cess revaluation of the district on the new system prescribed in the amended Act of 1934 established that the average yield must be 17 maunds an acre. Eighteen maunds has been adopted in Table II because crop cutting experiments between 1927 and 1931 show 19.75 maunds for aman paddy.

SOURCE (VI) ACCOUNT OF OUTTURN OBTAINED ON FARMS.

Too much account should not perhaps be taken of experimental farms run by the Department of Agriculture. The cultivation is done on a scale which no raiyat can afford to imitate. The Director of Agriculture, Punjab, gave us a striking example. The average outturn of wheat on a Government farm was 20 maunds, but the cost of cultivation per maund was equal to its selling price.

SOURCE (VII) THE ACTUAL AMOUNT OF PRODUCE PAID FOR FIXED RENT TENANCIES.

Instances of produce rents exceeding 10 maunds an acre are common in western Bengal² and are not unknown in eastern Bengal³. It may be conceded that all these rents apply to good lands, but it cannot be assumed that they all apply to exceptional lands, i.e., there must be in the localities where they prevail at least ten times as much land giving equally good outturns, and these lands must bring up the average for the district and the province.

Heavy cash rents are also an indication that good lands produce more than 18 maunds. Many lands in Howrah and Hooghly and possibly Burdwan have been leased on Rs. 16 an acre to raiyats for over 40 years, though they only produce one crop of paddy.

SOURCE (VIII) STATEMENTS OF 19TH CENTURY AUTHORITIES.

It is easy to decry these as being based on hearsay evidence, but the work of authorities like Colebrooke, Buchanan-Hamilton and Hunter was not superficial. Many of them had no connection with revenue proceedings or proceedings for enhancement of rent, and there was just as much likelihood of the village people, their informants, under-stating the yield as there is at the present day.

¹ Vide notification No. 27-I, dated the 23rd November 1936.

² See Appendix VI, Bankura Settlement Report.

³ See Paragraph 386, Mymensingh Settlement Report.

The following extracts are taken from MacDonnell's "Food-Grain Supply and Famine Relief in Behar and Bengal, 1876", page 216:—

"The average produce per acre, according to the Statistical Return, which in other points is so trustworthy, is 11 maunds of clean rice, $4\frac{1}{2}$ maunds of wheat and $5\frac{1}{2}$ maunds of all other sorts of grain. This estimate is fully borne out by the figures given in a note on Rice Statistics published in the November number of the Statistical Reporter."

"Lt. Otley of the Irrigation Department gave the average yield per acre from rice land in Dinajpur as 15 to 18 maunds of paddy."

"Nevertheless I am disposed to adopt the Collector's earlier average of 12 maunds of rice per acre. This question of average rates of produce is to me the most perplexing of any with which I have to deal. One maund more or less per acre will materially alter the complexion of my conclusion. Sometimes a district may look prosperous, while it gives a bare sufficiency to its people, or sometimes make it look poverty stricken while it is the reverse. I believe that hitherto writers on statistics have had a tendency to under-estimate the produce."

"In Murshidabad the average outturn in ordinary good years of an acre of rice land is 15 maunds husked grain. The Collector, Mr. Wavell, says that in good years some rice lands yield 60 maunds of *dhan* or 37 maunds of husked rice." (Page 262.)

On the other hand, it may be argued that in the last 40 or 60 years there has been much deterioration of the soil. *Prima facie* this could be expected because so little manure has been used and rotation of crops has never been resorted to on a sufficient scale.

But there is very little evidence in support of this view apart from the off hand statements of people who are interested in making it. Human nature being what it is, it would be strange if agriculturists did not incline to overestimate the advantages their forefathers enjoyed. It is interesting to note that in 1868 the tenants were making the same complaint of deterioration of yield to the Collector of Jessore.

The figures given by old authorities, like the figures given by recent Settlement Officers vary, but there are cases such as Chittagong and Midnapur and Ganjam where the present day yields are represented to be in excess of earlier estimates.

SOURCE (IX) VERBAL STATEMENT OF CULTIVATORS.

The statements of local people also have their part in the estimates discussed in the paragraphs relating to sources (IV), (V), and (VIII). Ordinarily it may be assumed that they are below the mark, because landlords and raiyats alike are suspicious that any admission of a good crop will sooner or later lead to enhancements of revenue or rent. A Settlement Officer in the United Provinces has pointed out that he has found both the landlords and the tenants regularly under-estimating the crop even in cases where they could have nothing to gain from doing so, because he was just about to weigh it.

SOURCE (X) REPORTS ABOUT THE PROFITS AND WORKING EXPENSES OF
PARTICULAR FAMILIES.

This has been done on a most elaborate scale in the Punjab¹ and in Madras. In nearly all cases the yields assigned to the various crops exceed the figure shown in the Government of India statistics. The Board of Economic Enquiry (Punjab) in its pamphlet on some aspects of Batai cultivation (1926), showed the average produce of a farm of 99 acres as Rs. 128-3 per acre. The tenants' average on smaller farms was reported to be Rs. 73 an acre. The introduction to "Farm accounts in the Punjab", 1936-37, gives the gross income per acre as Rs. 66 from all crops in the farms in the older districts of which accounts were kept. In Gilbert Slater's "Some South Indian Villages" the value of all crops is estimated at Rs. 84 an acre.

SOURCE (XI) EVIDENCE OF DIRECTORS OF AGRICULTURE AND OTHER
EXPERT WITNESSES.

The Director of Agriculture and the Financial Commissioner of the Punjab gave their opinion that the yields of crops in that province were higher than the Government of India statistics disclosed. The Director of Agriculture, Bengal, said "there are many lands capable of growing as good crops as Japan or China, where the average yield is 3 times that assumed in India". "In Tippera the average yield is more like 30 or 40 maunds."

SOURCE (XII) REPORT OF YIELDS IN OTHER PROVINCES AND COUNTRIES.

The statistics of other provinces show that the yield of sugarcane is much higher in Bombay and Madras than in Bengal, but in Bifaf and the United Provinces it is barely half the Bengal yield. The outturn of rice is higher in the Punjab and Bombay than in Bengal, and in Madras it is almost the same. Other crops are more or less equal.

The evidence from other countries shows that only in Siām where intensive cultivation does not pay, because there is still an unlimited amount of land available for cultivation, the yield of paddy is approximately the same as in Bengal. In Japan it is 3 times as much and in China some authorities also state 45 maunds an acre. Even this is described by Lessing Buck as an inadequate yield due to poor methods of cultivation.

The importance to be attached to these figures depends on to what extent we accept the traditional view that Bengal is a naturally favoured country and that in East Bengal at least, the climate and soil are ideal for the rice grower. In 1826 Bishop Feber wrote that "in Bengal, where, independent of its exuberant facilities, there is a permanent settlement, famine is unknown". Professor Radha Kamal Mukherjee in his *Land Problems of India* wrote that "it is the incomparable fertility of the soil of Bengal which is an assurance against famine".

If we deny that in view of the known yield of other countries, the estimates for Bengal are probably on the low side, we must admit either that (i) Bengal is not naturally a good country for agriculture, (ii) that the Bengal cultivator is inefficient or (iii) that the yields in other

¹ Vide Note A, page 129, Report of the Punjab Land Revenue Committee.

countries have been exaggerated. The last view is hardly possible because in Japan at least, the Government has conducted the most elaborate enquiries over a long series of years with a view to controlling prices by restricting imports to the bare minimum.

CONCLUSIONS AS TO YIELD.

It appears, therefore, that if reliance had to be placed on the first source of evidence only—crop cutting experiments—the conclusion would be that they do not take sufficient account of lands growing no crop, or a particularly bad crop, in a particular year, and that they are possibly on the high side. The balance of the other evidence, however, indicates that for some reason, which it is difficult to explain, they are on the low side. Reasons for believing that they are on the low side may be summarised as follows:—

- (1) The forecasts of the Director of Agriculture for jute, are based on the areas and yields which are reported to the Government of India for inclusion in their crop reports. But as Khan Bahadur Azizul Huque has shown on page 66 of the "Man Behind the Plough" they have to be increased every year by about 20 per cent. to account for the jute which actually reaches the markets. The Punjab Land Revenue Committee has pointed out that the cotton crop is also always 20 per cent. in excess of the forecasts. There is no reason why a deficiency proved to exist in the case of these two important commercial crops should not apply to rice also.
- (2) "The Problem of Bengal's Rice Supply," a bulletin issued by the Board of Economic Enquiry, estimates consumption of paddy at 486 million maunds or 500 million maunds, including the quantity used as seed. It is based on an allowance of 9 maunds per head per annum, which is less than the estimates of the majority of Famine Commission, Settlement, and other reports. Even if the normal yield of 18·8 maunds shown in the Tables is accepted, there would be a deficiency of 18 million maunds.

Table V shows the amount of paddy grown in each district on the yields which have been shown in Table II, and the consumption at an average rate of 9 maunds per head. It does not take into account the increase of population since 1931 and the quantity of paddy used as seed. Though in the majority of districts there is practical equilibrium after making adjustments on these accounts, in one district at least, Dacca, consumption is double the production. In spite of the density of the population it is difficult to believe that this district is not self-supporting or that its inhabitants do not get two meals a day. This is the district which is so fertile that in the days of Shaista Khan the price of paddy fell to 16 maunds a rupee.

We know that the balance of imports over exports is at most two million maunds a year. This is an insignificant proportion of the 500 million maunds estimated to be required. If we accept any yield less than 18 or 19 maunds an acre, we must also accept the conclusion that a large proportion of the agricultural population do not get two meals a day. Some of our members hold this belief and estimate the average consumption as more like 7½ maunds than 9 maunds per head.

On the yields which have been shown in the tables, the gross value of the crops of the Province is 143.4 crores according to the prices ruling in the period of depression. The portion of the estimate which represents miscellaneous crops like spices, fruits, and vegetables may seem a high proportion of the whole. If it is excessive, it affects the accuracy of the estimates materially. But it is based on close examination of the reports of all Settlement Officers. The majority of the Settlement Officers estimated betel leaves at Rs. 300 an acre and some have gone up to Rs. 500 or Rs. 1,000. Brinjals and onions have been estimated at Rs. 200 an acre. The Settlement Officer, Dinajore, valued potatoes at Rs. 131 an acre. The Settlement Officer of Chittagong estimated thatching grass at Rs. 130 an acre; and the Settlement Officer, Dacca, at Rs. 100. The Midnapore Zamindari Company, said that grass suitable for paper-making is worth Rs. 150 an acre.

III. PRICES.

Table III traces the changes which prices have undergone since the earliest period of which records are available. The prices shown in Tables II(a), (b), etc., are not the prices of any particular year. Like the yields, they are the prices reported by the Settlement Officers of each district, modified and adjusted so as not to show any improbable divergence as between one district and another due to the different years in which the records were prepared. On the whole they represent the prices actually prevailing during the years of the recent depression and before 1918, when the boom period began. The price of aman paddy has been taken at Rs. 2 a maund and the price of aus paddy and boro paddy at Re. 1-12 a maund for all districts. Rs. 2 an acre has been added as the value of the straw. This is a very moderate estimate, though in some villages straw may practically be unsaleable owing to the want of communications.

IV. COST OF CULTIVATION.

Innumerable attempts have been made to estimate the cost of cultivation of different crops by charging so many ploughings at 8 annas a time and so many days labour for weeding, reaping, etc., at 3 or 4 annas a time. Experience has shown that it is difficult on this system to make the cost of labour, cattle, implements, seed, manure, irrigation expenses and rent amount to less than the value of the gross crop¹. In Japan the cost of cultivation calculated by this method comes to Rs. 121 per acre². According to the evidence of the Director of Agriculture, Bengal, every maund of jute sold for less than Rs. 5

¹Farm accounts in the Punjab, 1936-37, give the cost of cultivation in the older districts as Rs. 65 an acre for irrigated land, of which 6 per cent. represents land revenue, 20 per cent. rent, 23 per cent. bullock labour, 31 per cent. manual labour, 5 per cent. irrigation arrangements and water rates; seeds 4 per cent. and miscellaneous 5 per cent.

²Ryoich Ishii's "Population, Pressure and Economic life in Japan" says that the cost of cultivation is 32 yen per koku, when the average outturn was 7.6 koku per acre or roughly 45 maunds. 344 million yen was spent on artificial fertilisers, the average per acre being 22 yen or about Rs. 18.

is a loss to the cultivator. But the price of jute had been less than Rs. 4 from 1932-38 and Government has found it difficult to persuade the cultivators to reduce the area.

The Commission is not concerned with the cost of cultivation of capitalist farmers who can pay cash wages for all the work done on their farms. It is concerned with the humble agriculturist who has nothing to do but till his own land and in fact finds it difficult to find work for more than 80 or 120 days in the year. In his case, his food and that of his family is the sole reward of his labour. Many authorities have pointed out that it is not in India alone that the small farmer earns less for each day's labour than the hired labourer¹.

In the publication "World Agriculture, an International Survey" (Oxford-1932) it is said:—

"A large part of the agriculture of the world is carried on by the family who receive no wages. The part performed by such unpaid labour cannot be estimated. Various problems rise out of the prevailing use of family labour. One of the most insistent is the difficulty of giving an economic and financial value to it. This very unsatisfactory result emerges that on this system of reckoning, a family farmer is frequently found to be working for less reward than the hired worker. This reverses the position ordinarily attributed by the parties concerned to their respective positions. It is one of the unsolved problems of agricultural investigation. It wrecks any attempt at an exact economic comparison between the rewards of agricultural effort in peasant countries and in countries of advanced and commercial agriculture."

Lessing Buck in his study of 2,866 farms in various provinces of China, estimated the profits of farming in 8 different ways. He says that what he calls "family earnings" is the most useful measure for comparison with other countries. By this he means the value of the produce sold and consumed by the farmer less his expenditure, in which he does not include any allowance for the labour of the members of the family itself. If the cost of hired labour is omitted from consideration, the only cash expenditure the cultivator need necessarily incur is the purchase of bullocks every five or seven years, the cost of feeding them, the purchase and upkeep of implements, the cost of seed, and sometimes of manure. For all these items, different authorities have made very different estimates. Even on the seed requirements for paddy fields there is no agreement between one maund and half a maund an acre. Some cultivators breed their own cattle and very few spend any money on buying food for them. In China 34 per cent. of the small farmers employ no cattle at all. Manure does not seem to be absolutely essential for paddy fields.

V. THE OTHER EXPENSES OF AN AGRICULTURAL FAMILY.

The main expense is the cost of food, which the Commission has estimated at 9 maunds of paddy per head per annum. Though a certain amount of salt, oil, and other things are necessary, the grain and

¹Ryoich Ishii says that in 1919 the wages of factory workers were 1.8 yen a day as opposed to .54 yen calculated for the working days of farmers.

According to "Punjab Farm Accounts", 1936-37, the earnings of hired labour were 5 annas 2 pies per diem and those of family labour 2 annas 10 pies in one class of the farms examined.

other produce grown on the farm are the main food of the agriculturists in all parts of India. To some extent, however, it is supplemented by milk, poultry and eggs and, in Bengal, to a large extent by fish.

The estimates which have been made by the Banking Enquiry Committees, the Boards of Economic Enquiry, and the Settlement Officers of many districts illustrate the immense difficulty of arriving at a satisfactory figure for the other necessary expenditure of an agricultural family. Estimates of the cost of clothes varies from Rs. 6 to Rs. 50. It is impossible to give an average figure for the cost of social ceremonies, education, medicines, litigation, and interest on debt. The only items of which the average incidence can be stated with any certainty are rent and taxation. The cost of keeping the homestead in repair and of buying furniture and utensils can hardly be given a definite figure. The cost of fuel varies in every locality. In hard times, the small farmers of all countries have to avoid expenditure on articles which most people would regard as necessities. Lessing Buck says that in China the farmers are too poor to drink tea or to boil their drinking water on account of the cost of fuel.

VI. SUBSIDIARY SOURCES OF INCOME.

Reasons have been given in paragraph 171 of the report for not attempting any general estimate of subsidiary income. The United Provinces Banking Enquiry Committee in chapter VIII of their report point out that—

- (i) 46 per cent. of the cultivators are debt free.
- (ii) Though 56 per cent. possess uneconomic holdings, the proportion of debt free amongst these small farmers is as large as among the farmers with sufficient land.
- (iii) Debt is least heavy in those tracts where the number of uneconomic holdings is largest.
- (iv) Debts increase directly with the size of the holdings.

They think that the explanation of these paradoxes depends more on the supposition that Indian cultivators have resources from subsidiary income¹ than on the consideration that nobody will lend money to people who are poor.

DISTRIBUTION OF THE LAND.

No figures are available for any large areas showing the proportion of families with different sized farms. Tables VIII(a), (b), etc., show the result of enquiries made about nearly 20,000 families in various districts through the agency of the Settlement Department with a view to obtain more information about the percentage of families having economic holdings and the proportion of lands cultivated by bargadars, and the number of bargadars who also hold land as raiyats or under-raiyats. The results of these enquiries have been referred to in paragraph 156 of the report. They correspond very closely with the results of enquiries made during the course of recent Settlement operations in Rangpur, Dinajpur², and Mymensingh. The Board of Economic

¹See also section 26 of the Bengal Banking Committee's Report.

²The Dinajpur Settlement Officer reported that out of 2,639 families of bargadars examined with an average area of 4.32 acres; 74 per cent. have subsidiary income of Rs. 20 each at least.

Enquiry, in its Reports on Rural Indebtedness and the Weaving Industry, also tabulated the number of families holding less than two acres, between 2 and 4 acres, etc. The number of families investigated in all these enquiries, however, form only a small proportion of the total number of families in the Province¹.

THE NET INCOME OF AGRICULTURAL FAMILIES.

This note has been written with a view to explain the difficulties which stood in the way of the Commission hazarding any estimate of the profits or net income either of the agricultural families in the Province as a whole, or of any particular class. If the estimate of the Bengal Banking Enquiry Committee, referred to in the report, did not exaggerate the expenditure, every family would have been spending nearly twice as much as it received each year since 1930, because, it is certain that expenditure has not come down in the same proportion as the prices of produce. The figures given by the author of the "Man Behind the Plough" would lead to the same conclusion. He says that the total income per family is Rs. 184 and the expenditure Rs. 292. If these figures mean anything, they imply that the agriculturists of Bengal have been living for the last 7 years on the savings of their creditors. The figures given by the Board of Economic Enquiry in its report on Agricultural Indebtedness may give an equally wrong impression. Even on the basis of the 1928 prices, there was only a small surplus over expenditure in most districts, and on the prices of 1933 there was a definite deficiency. Similar results have been arrived at by the investigators who have calculated the profits of cultivation in China and Japan in terms of pounds, shillings and pence².

¹"World Agriculture," Oxford University Press, 1932, says that in Japan 2 million families out of 6 million have less than 1½ acres and another 2 million families hold between 1½ and 2½ acres.

Tawney's "Land and Labour in China (1932)" sums up the information about the size of farms and the fragmentation of cultivation in that country. 36 per cent. of the farmers hold less than 1.5 acres.

²If the minimum income has been rightly estimated at 150 dollars, more than half the families in the eastern districts and more than four-fifths in the northern villages had an income below the minimum required to support life. Tawney's "Land and Labour in China".

APPENDIX IX.

Table No. I.

Area under cultivation and cultivable waste.

District.	Total area in thousand acres.	Net cultivated area.		Cropped more than once.		Cultivable waste.	
		Area in thousand acres.	Percentage of total area.	Area in thousand acres.	Percentage of cultivated area in column 3(a).	Area in thousand acres.	Percentage.
1	2	3 (a)	3 (b)	4 (a)	4 (b)	5 (a)	5 (b)
Bakarganj ..	2,254	1,553	68.9	229	14.7	129	5.7
Bankura ..	1,680	797	47.4	26	3.3	253	15.1
Birbhum ..	1,087	765	70.4	27	3.5	87	8.0
Bogra ..	886	723	81.6	99	13.7	24	2.7
Burdwan ..	1,731	1,080	62.4	58	5.4	115	6.6
Chittagong ..	1,645	632	38.4	141	22.3	217	13.2
Dacca ..	1,751	1,305	74.5	453	34.7	31	1.8
Dinajpur ..	2,527	1,923	76.1	189	9.8	362	14.3
Faridpur ..	1,508	1,197	79.4	376	31.4	120	8.0
Hooghly ..	760	534	70.3	68	12.7	48	6.3
Howrah ..	334	239	71.6	39	16.3	21	6.3
Jalpaiguri ..	1,876	708	37.7	36	5.1	127	6.8
Jessore ..	1,857	1,410	75.9	299	21.2	129	6.9
Khulna ..	3,001	1,115	37.2	39	3.5	169	5.6
Malda ..	1,270	847	66.7	236	27.9	113	8.9
Midnapore ..	3,357	1,994	59.4	47	2.4	373	11.1
Murshidabad ..	1,307	941	71.9	309	32.8	126	12.5
Mymensingh ..	3,992	2,661	66.7	947	35.6	243	6.1
Nadia ..	1,844	1,279	69.4	483	37.8	270	14.6
Noakhali ..	972	720	74.1	260	36.1	28	2.9
Pabna ..	1,164	835	71.7	287	34.4	100	8.6
Rajshahi ..	1,670	1,239	74.2	219	17.7	92	5.5
Rangpur ..	2,305	1,611	69.9	678	42.1	307	13.3
Tippera ..	1,662	1,304	78.5	469	36.0	18	1.1
24-Parganas ..	3,108	1,407	45.3	91	6.5	136	4.4
Darjeeling ..	776	121	15.6	17	14.0	87	11.2
Total ..	46,324	28,940	62.4	6,122	20.1	3,725	8.0

N. B.—(1) The table has been compiled from Settlement statistics.

(2) The total area in column 2 includes the following area under reserved and protected forest:—

(In thousand acres.)

Bakarganj	Chittagong.	Dacca.	Jalpaiguri.	Khulna.	Mymensingh.	24-Parganas.	Darjeeling.	Total.
1	2	3	4	5	6	7	8	9
6	547	32	360	1,483	46	1,043	288	3,805

Table No. II (a).

Yield of aman paddy.

*Normal yield according to Bengal Season and Crop Report, 1935-36-20 maunds (13½ maunds rice).

Forecast yield according to Government of India estimates of area and yield, 1935-36.

10 years' average 16.90 .

District.	Settlement Officer's estimate in maunds per acre.	Quin- quennial Crop Cutting Reports (average of 5 years, 1932-37).	Adopted normal yield.
• 1	2	3	4
Bakarganj	22	17.86	22
Bankura	16	21.74	18
Birbhum	18	15.21	18
Bogra	21	17.43	20
Burdwan	23	16.11	20
Chittagong	25	17.45	23
Dacca	16	17.47	18
Dinajpur	19	20.43	19
Faridpur	19	17.76	19
Hooghly	22	17.26	22
Howrah	22	21.69	22
Malpauri	22	17.73	21
Jessore	15	16.20	18
Khulna	20	18.54	19
Malda	17	15.43	17
Midnapore	16	16.83	18
Murshidabad	18	14.89	17
Mymensingh	20	16.87	20
Nadia	16	14.59	15
Noakhali	20	14.34	20
Pabna	21	17.43	20
Rajshahi	18	15.15	19
Rangpur	20	19.60	20
Tippera .. ..	..	17.52	21
24 Parganas	20	16.83	20

N.B.—The figures in column 4 have been adopted after consideration of all the sources of information available, and the expression "normal yield" has been used in the sense that it is the figure which in existing circumstances might be expected to be attained in the year if the rainfall and season were of a character ordinary for the tract under consideration, that is, neither very favourable nor the reverse. (Vide Appendix I, estimates of area and yield of principal crops in India, 1936-37.)

Table No. II (b).

Yield of aus paddy.

Normal yield according to Season and Crop Report, 1935-36—19 maunds
(12½ maunds rice).

District.	Settlement Officer's estimate in maunds per acre.	Quin- quennial Crop Cutting Reports (average of 5 years, 1932-37).	Adopted normal yield.
1	2	3	4
Bakarganj	10 to 14	15	15
Bankura	16	16.29	16
Birbhum	15	14.85	18
Bogra	15	14.10	15
Burdwan	20	16.20	16
Chittagong	21	17.25	21
Dacca	13	13.5	16
Dinaipur	13	15.52	15
Faridpur	11	13.83	15
Hooghly	19	18.78	19
Howrah	16	15.19	16
Jalpaiguri	18	13.77	15
Jessore	14	15.95	15
Khulna	15 to 20	14.30	15
Malda	12	11.13	12
Midnapore	12	14.76	16
Murshidabad	15	15.61	16
Mymensingh	18	15.61	16
Nadia	13	13	13
Noakhali	17	13.71	16
Pabna	14	14.47	15
Rajshahi	13	12.82	16
Rangpur	15	17.41	16
Tippera .. ..	..	13.86	18
24 Parganas	14	14.10	15

N. B.—Vide footnote to table No. II (a).

Table No. II (c).

Yield of boro paddy.

Normal yield according to Season and Crop Report, 1935-36—23 maunds
(15 maunds rice).

District.	Settlement Officer's estimate in maunds per acre.	Quin- quennial Crop Cutting Reports (average of 5 years, 1932-37).	Other sources (D. L. R. 1933).	Adopted normal yield.
1	2	3	4	5
Bakarganj ..	25 to 30	17·71	26·25	25
Bankura ..	..	..	..	20
Birbhum ..	..	..	..	18
Bogra ..	..	..	22·50	20
Burdwan ..	..	21·07	20·55	20
Chittagong ..	..	..	33·60	20
Dacca ..	20	17·98	23	22
Dinajpur ..	23	17·25	21·30	22
Faridpur ..	22	20·94	31·20	22
Hooghly ..	..	..	20·40	19
Howrah ..	..	..	28·05	20
Jalpaiguri ..	..	..	21	21
Jessore ..	16	21·42	19·27	20
Khulna ..	15 to 20	19·75	25·05	20
Malda ..	24	18·93	43·20	22
Midnapore ..	18	..	25·41	22
Murshidabad ..	..	18·21	25	20
Mymensingh ..	30	21·69	40·26	26
Nadia ..	..	..	12·22	20
Noakhali ..	25	..	41·55	20
Pabna ..	..	14·92	19·35	20
Rajshahi ..	14	19·63	21·65	22
Rangpur ..	..	..	17·70	22
Tippera ..	30 to 35	19·03	41·55	20
24 Parganas ..	14	..	27·90	20

N. B.—Vide footnote to table No. II(a).

Table No. II (d).

*Yield and price of jute.*Normal yield according to Season and Crop Report, 1935-36—17½
maunds.

District.	Settle- ment Officer's estimate in maunds per acre.	Quinquen- nial Crop Cutting Reports (average of 5 years, 1932-37).	Adopted normal yield.	Price per maund adopted.
1	2	3	4	5
				Rs. a.
Bakarganj	22	14.88	17	3 4
Bankura .. ..	..	..	16	4 0
Birbhum .. ..	..	..	17	4 0
Burdwan .. ..	..	15.66	16	3 8
Bogra .. ..	..	16.03	17	4 0
Dacca	15	15.33	17	5 0
Dinajpur	12	16.62	16	3 8
Faridpur .. ..	..	14.79	17	4 0
Hooghly .. ..	..	16.45	17	4 8
Howrah .. ..	..	15.19	16	4 8
Jalpaiguri .. ..	..	15.21	16	4 0
Jessore	13	16.68	16	4 4
Khulna .. ..	..	14.98	15	3 8
Malda	15	14.48	16	4 0
Midnapore .. ..	..	15.79	16	4 8
Murshidabad .. ..	..	14.52	17	4 0
Mymensingh	16	16.82	17	5 4
Nadia	13	13.82	14	4 4
Noakhali	20	14.34	17	4 8
Pabna	17	15.46	15	4 0
Rajshahi	10	13.12	15	4 8
Rangpur	15	18.41	18	3 8
Tippera .. ..	..	15.11	16	3 4
24 Parganas	15	17.58	17	4 0

N. B.—Vide footnote to table No. II (a).

Table No. II(a).

Yield and price of gram.

Normal yield according to Season and Crop Report, 1935-36—11½ maunds.

District.	Settlement estimate in maunds per acre.	Quinquennial Crop Cut- ting Reports (average of 5 years, 1932-37).	Other sources (D. L. R., 1933).	Adopted normal yield.	Price per maund.		
					According to Agricul- tural Statistics of India.		Adopted.
					1931.	1935.	
1	2	3	4	5	6	7	8
					Rs. a.	Rs. a.	Rs. a.
Bakarganj ..	..	..	12	..	..	..	..
Bankura ..	..	9.06	..	10	..	3 0	3 8
Birbhum ..	..	8.55	..	10	3 0	2 11	2 12
Bogra ..	..	11.26	..	11	3 0	2 12	3 0
Burdwan ..	..	10.81	..	11	3 8	2 4	3 0
Chittagong ..	..	..	..	..	..	..	..
Dacca ..	12	8.82	..	10	4 5	3 6	3 8
Dinajpur ..	7	10.15	14	9	..	..	3 8
Faridpur ..	12	10.32	..	11	2 0	1 13	2 8
Hooghly ..	..	7.41	..	8	3 12	3 4	3 8
Howrah ..	..	8.48	..	8	..	..	3 8
Jalpaiguri ..	..	..	..	9	..	..	3 8
Jessore ..	8	9.66	..	8	2 8	2 0	2 4
Khulna ..	..	..	13.8	..	2 14	2 12	..
Maldah ..	10.50	10.11	..	11	2 0	2 0	3 8
Midnapore ..	..	8.06	..	8	4 0	4 0	3 8
Murshidabad ..	12	8.78	..	9	2 4	2 3	2 0
Mymensingh ..	6	10.35	7.56	10	..	..	3 8
Nadia ..	10	8.52	..	10	2 0	2 1	3 8
Noakhali ..	..	14.22	13.96	..	..	..	..
Pabna ..	..	8.41	..	10	3 0	2 0	2 4
Rajshahi ..	10	8.43	20.6	8	2 3	2 8	2 4
Rangpur ..	9	5.74	10.2	9	3 4	4 0	3 8
Tippera ..	..	11.03	..	..	4 0	..	..
24 Parganas ..	7	10.90	..	10	3 4	4 0	3 8

N.B.—Vide footnote to table No. II (a).

Table No. II (f).

Yield and price of pulses.

Normal yield according to Season and Crop Report, 1935-36—11 maunds.

District.	Settlement Officer's estimate in maunds per acre.	Adopted normal yield.	Price per maund adopted.
1	2	3	4
			Rs. a.
Bakarganj	8 to 12	7	3 8
Bankura .. ..	..	10	3 8
Birbhum .. ..	..	..	2 4
Bogra .. ..	..	10	3 8
Burdwan .. ..	..	11	3 8
Chittagong .. ..	..	7	3 8
Dacca	4 to 10	10	2 13
Dinajpur	5.5	8	3 8
Faridpur	10 to 12	8 to 11	3 5
Hooghly .. ..	..	8	3 8
Howrah .. ..	..	8	3 8
Jalpaiguri .. ..	..	..	..
Jessore	7	10	2 4
Khulna .. ..	..	10	2 4
Malda	9	10	3 8
Midnapore .. ..	..	8	3 8
Murshidabad .. ..	..	10	2 4
Mymensingh	6	7	2 7
Nadia	5.5	6	3 8
Noakhali .. ..	..	7	3 8
Pabna	8	10	3 8
Rajshahi	3 to 6	10	3 4
Rangpur	3.5 to 5	8	3 8
Tippera .. ..	..	7	3 2
24-Parganas	6	10	2 4

N. B.—Vide footnote to table No. II (a).

Table No. II(g).

Yield and price of mustard.

Normal yield according to Bengal Season and Crop Report, 1935-36—7½ maunds.

Forecast yield according to Government of India estimates of area and yield, 1935-36.

10 years' average

..

.. 5.40

District.	Settlement Officer's estimate in maunds per acre.	Quinquennial Crop Cutting Reports (average of 5 years, 1932-37).	Other sources (D.L.R. 1933).	Adopted normal yield.	Price per maund.	
					According to Agricultural Statistics of India, 1935.	Adopted.
1	2	3	4	5	6	7
					Rs. a.	Rs. a.
Bakarganj ..	..	5.88	7.30	6	3 13	3 12
Bankura ..	..	7.29	7	7	4 4	4 8
Birbhum ..	4	..	9.40	7	4 10	4 12
Bogra ..	3	6.90	8.70	7	5 0	4 4
Burdwan ..	..	6.19	..	6	4 0	4 0
Chittagong ..	..	8.32	6.80	7	6 0	2 8
Dacca ..	10	5.57	6.60	6	4 13	3 8
Dinaipur ..	4.50	6.94	9	7	..	5 0
Faridpur ..	7	6.90	15	7	3 5	3 8
Hooghly ..	..	..	..	7	3 4	4 8
Howrah ..	..	6.45	8.50	7	5 0	4 8
Jalpaiguri ..	..	7.43	9	8	3 4	3 4
Jessore ..	5	6.74	8	7	5 0	4 8
Khulna ..	..	5.63	8.10	6	5 8	5 0
Malda ..	8	7.89	..	9	4 8	4 8
Midnapore ..	..	5.29	8.60	6	6 8	5 8
Murshidabad ..	4	5.72	8.50	6	3 5	3 8
Mymensingh ..	6	6.73	6.90	7	3 6	4 0
Nadia ..	5	6.83	9.53	7	3 12	4 0
Noakhali ..	9	7.52	5.58	7	5 0	3 8
Pabna ..	3	6.12	10.10	7	3 8	4 8
Rajshahi ..	3	7.98	4.30	8	4 4	4 0
Rangpur ..	6	8.51	6	9	5 8	5 8
Tippera ..	..	5	8.90	7	5 0	5 4
24 Parganas ..	6	7.77	..	7	5 0	5 0

Table No. II(h).

Yield and price of linseed.

Normal yield according to Bengal Season and Crop Report, 1935-36—7½ maunds.

Forecast yield according to Government of India estimates of area and yield, 1935-36.

10 years' average

.. 4.54

District.	Settle- ment Officer's estimate in maunds per acre.	Quin- quen- nial Crop Cutting Reports (average of 5 years, 1932-37).	Other sources (D.L.R. 1933).	Adopted normal yield.	Price per maund.	
					Accord- ing to Agri- cultural Statist- ics of India, 1935.	Adopted.
1	2	3	4	5	6	7
					Rs. a.	Rs. a.
Bakarganj ..	..	..	7.30	6	4 11	4 12
Bankura ..	..	7.51	7	7	6 0	4 0
Birbhum ..	..	8.27	9.40	7	3 12	4 0
Bogra ..	5	5.55	8.70	6	..	3 8
Burdwan ..	..	6.64	16.90	6	3 4	3 8
Chittagong ..	..	..	..	7	5 0	3 8
Dacca ..	2	6.71	6.60	7	5 0	3 8
Dinajpur ..	4	5.87	9	6	..	4 0
Faridpur ..	9	7.13	15	7	3 13	3 4
Hooghly ..	..	..	8	9	3 0	4 8
Howrah ..	9	8.72	8.54	9	..	4 8
Jalpaiguri ..	..	..	..	6	..	3 4
Jessore ..	5	6.75	8	7	3 0	3 4
Khulna ..	..	..	8.10	6	7 0	6 8
Malda ..	9.50	9.33	8.60	9	4 0	4 0
Midnapore ..	..	5.35	8.21	6	6 0	4 8
Murshidabad ..	..	6.15	8.50	6	3 11	3 8
Mymensingh ..	6	6.62	6.96	7	3 4	3 8
Nadia ..	6	5.32	..	6	3 11	4 0
Noakhali ..	9	..	..	7	4 0	3 8
Pabna ..	5	5.79	10.10	6	3 5	3 8
Rajshahi ..	2.25	5.73	4.30	6	3 8	3 4
Rangpur ..	6	..	..	6	..	4 0
Tippera ..	..	..	..	6	5 8	5 8
24-Parganas ..	6	..	8	7	3 0	2 12

Table No. II (i).

Yield and price of til.

Normal yield according to Bengal Season and Crop Report, 1935-36—7½ maunds.

Forecast yield according to Government of India estimates of area and yield, 1935-36.

10 years' average

..

.. 5.10

District.	Settlement Officer's estimate in maunds per acre.	Quinquen- nial Crop Cutting Reports (average of 5 years, 1932-37).	Adopted normal yield.	Price per maund adopted.
1	2	3	4	5
				Rs. a.
Bakarganj ..	..	5.30	6	3 8
Bankura ..	..	5.36	7	4 0
Birbhum ..	..	6.12	7	4 0
Bogra ..	..	5.95	6	3 8
Burdwan ..	..	..	6	3 8
Chittagang ..	..	6.81	7	3 8
Dacca ..	9	7.63	7	3 8
Dinajpur ..	4.50	6.20	7	4 0
Faridpur ..	12	8.43	8	3 8
Hooghly ..	..	..	6	3 8
Howrah ..	..	..	6	3 8
Jalpaiguri ..	..	..	7	3 4
Jessore ..	5	6.55	6	3 4
Khulna ..	..	..	7	3 8
Malda ..	..	..	7	3 8
Midnapore ..	..	5.39	6	4 8
Murshidabad ..	..	6.41	6	3 8
Mymensingh ..	6	..	7	3 8
Nadia ..	..	6.14	6	3 8
Noakhali ..	9	..	7	3 8
Pabna ..	..	6.13	7	3 8
Rajshahi ..	4.33	6.94	7	3 8
Rangpur ..	5 to 6	..	7	4 0
Tippera ..	..	..	7	3 8
24 Parganas ..	6	..	7	2 12

N.B.—Vide footnote to table No. II(a).

Table No. II (j).

Yield and price of sugarcane.

Normal yield according to Bengal Season and Crop Report, 1935-36—56½ maunds (Gur).

Forecast yield according to Government of India estimates of area and yield, 1935-36.

10 year's average 38.41 maunds.

District.	Settlement Officer's estimate in maunds per acre.	Quinquennial Crop Cutting Reports (average of 5 years, 1932-37).	Other sources (D. L. R. 1933).	Adopted normal yield.	Price per maund.	
					According to Agricultural Statistics of India, 1935.	Adopted.
1	2	3	4	5	6	7
					Rs. a.	Rs. a.
Bakarganj ..	35 to 50	39.11	43.50	40	4 5	4 4
Bankura ..	..	61.02	32.60	56	4 0	4 0
Birbhum ..	90	43.94	..	50	3 0	3 0
Bogra ..	..	52.17	37	54	4 0	4 0
Burdwan ..	..	67.47	37	60	4 8	4 0
Chittagong ..	..	44.59	37	50	4 8	4 8
Dacca ..	..	55.59	41.90	55	4 0	4 0
Dinajpur ..	43	55.07	44.60	54	..	3 8
Faridpur ..	40 to 60	47.46	..	55	4 0	4 0
Hooghly ..	..	57.08	37	56	4 8	4 8
Howrah ..	80	53.26	40.20	54	5 8	4 8
Jalpaiguri ..	..	45.33	39	45	4 4	4 0
Jessore ..	50	50	51.10	50	1 4	2 4
Khulna ..	..	58.55	..	56	3 8	3 8
Malda ..	..	48.84	37	50	4 0	3 8
Midnapore ..	..	60.98	38.84	56	5 0	4 0
Murshidabad ..	90	57.17	40	56	3 8	3 8
Mymensingh ..	50	58.39	53.76	58	3 4	4 8
Nadia ..	..	47.13	51.16	50	3 5	4 0
Noakhali ..	..	45.05	37	50	5 8	4 8
Pabna ..	..	56.87	49.30	56	4 0	3 8
Rajshahi ..	61	54.20	74.40	56	3 14	3 8
Rangpur ..	40	48.29	43.50	48	3 7	4 0
Tippera ..	..	57.53	46.20	58	5 0	4 8
24-Parganas ..	60	59.32	..	58	4 0	4 8

N.B.—Vide footnote to table No. II(a).

Table No. II (k).

Yield and price of tobacco.

District.	Settle- ment Officer's estimate in maunds per acre.	Quinquen- nial Crop Cutting Reports (average of 5 years, 1932-37).	Adopted normal yield.	Price per maund.	
				According to Agri- cultural Statistics of India, 1935.	Adopted.
1	2	3	4	5	6
				Rs. a.	Rs. a.
Bakarganj ..	..	12.95	12	..	5 0
Bankura ..	..	12.61	12	..	6 8
Birbhum ..	..	..	12	..	5 8
Bogra ..	..	7.52	8	..	7 8
Burdwan ..	..	..	12	7 0	7 8
Chittagong ..	..	14.79	12	10 0	6 0
Dacca ..	10	10.25	10	..	6 0
Dinaipur ..	5	12.18	10	..	5 0
Faridpur ..	..	11.37	12	8 8	6 0
Hooghly ..	..	..	12	7 0	8 0
Howrah ..	12	12.52	12	..	8 0
Jalpaiguri ..	..	9.74	10	7 8	7 8
Jessore ..	8	8.93	10	8 0	7 8
Khulna ..	..	13.56	12	11 0	11 12
Malda ..	11	10.91	11	6 8	6 8
Midnapore ..	..	11.89	12	18 0	8 0
Murshidabad ..	..	11.21	12	4 12	5 8
Mymensingh ..	9	11.91	12	7 0	6 0
Nadia ..	..	12.32	12	5 8	6 0
Noakhali ..	..	..	..	..	..
Pabna ..	..	11.02	12	8 0	7 8
Rajshahi ..	8	8.55	9	8 0	7 8
Rangpur ..	12	13.61	14	4 0	6 8
Tippera ..	..	10.58	12	10 0	9 0
24 Parganas ..	7	14.79	12	6 0	7 4

N.B.—Vide footnote to table No. II(a).

Table No. III.

Variation in the prices of paddy between 1675 and 1936.

Years.	Bengal.		Other provinces.			Remarks.
	Price per maund.	Source of information.	Province.	Price per maund.	Source of information.	
	Rs. a. p.			Rs. a. p.		
1675	0 1 4	"District Gazetteer," Dacca, page 31.*	....	..	....
1768	0 4 0 to 0 5 3	Bengal District Records, Rangpur, 1770-79, pages 23-24.	....	..	....
1787	1 1 4	Collector's Report, Rangpur (after great flood).	....	..	....
1788	0 10 5	Birbhum Settlement, Report of 1924-32, page 74.	....	..	....
1789-90	0 2 0 to 0 8 0	"Rice in the husk sold, one season, as low as eight mans for the rupiya. In the following year it was eagerly pur- chased at the rate of a rupiya for two mans"—Cole- brooke's Husband- ry of Bengal, page 67 (footnote).	....	..	....
1791	0 7 5	Collector's Report, Rangpur.	....	..	....
1793	0 11 8	Administration of the Hooghly Dis- trict, 1795-1845. By G. Toynbee, page 165.	Orissa	.. 0 6 0 to 0 8 0	Orissa Final Settle- ment Report of 1890-1900. By S. L. Maddox.	
1795	0 7 5	Ditto ..	....	..	....
1800	0 9 5	Ditto ..	....	..	....
1804	0 10 2	Ditto ..	Orissa	.. 0 6 5	Orissa Final Settle- ment Report of 1890-1900. By S. L. Maddox.	
1808	0 7 6	Buchanan—Hamil- ton (Dinajpur). Settlement Officer's letter.	....	..	....
	0 12 0	Administration of Hooghly District, 1795-1845, page 165. By G. Toyn- bee.	....	..	....
1811	..	....	Orissa	.. 0 5 0	History of Orissa, 1802-28. By G. Toynbee.	
1813	0 5 0	Collector's Report, Rangpur.	....	..	....
	0 10 9	Administration of Hooghly District, 1795-1845, page 165. By G. Toyn- bee.	....	..	....

*Shaista Khan when leaving Dacca after governing Bengal from 1664-77 and again from 1679-89, ordered the Western gate to be built up in commemoration of the price of rice falling in his time to the rate of 640lbs. per rupee.

Table No. III—continued.

Years.	Bengal.		Other provinces.			Remarks.
	Price per maund.	Source of information.	Province.	Price per maund.	Source of information.	
	Rs. a. p.			Rs. a. p.		
1815	..	....	Orissa	0 5 0	Orissa Final Settlement Report. By S. L. Maddox.	
1815	..	....	Do.	0 6 0	History of Orissa. By G. Toynbee.	
1821	1 1 3	Administration of the Hooghly District, 1795-1845. By G. Toynbee, page 94.	....	..	....
1824	..	....	Orissa	0 7 4	Orissa Final Settlement Report of 1890-1900. By S. L. Maddox.	
1831	..	....	Do.	0 13 0	Ditto.	
1834	0 15 11	Administration of the Hooghly District, 1795-1845. By G. Toynbee, page 94.	....	..	....
1840	0 12 2	Statistical accounts of Bengal. By W. W. Hunter (Murshidabad).	....	..	....
1841	..	....	Madras	0 15 1	A	Rs. 85 per garce. 1 garce = 90 maunds.
1843	0 9 3	Allen's Settlement Report, Chittagong.	....	..	....
1850	..	....	Madras	0 15 1	A	
1852	..	....	Do.	0 13 6	A	
1853	..	....	Do.	1 2 4	A	
1855	..	....	Do.	1 6 11	A	
1851-55 average.	..	....	Do.	1 1 7	A	
1860	1 4 0	Statistical accounts of Bengal-Murshidabad. By W. W. Hunter. (Famine year.)	....	..	....
	0 6 0 to 0 14 10	Sherwill (Dinajpur), Settlement Officer's letter.	Madras	1 11 2	A	
1856-60 average.	..	....	Do.	1 8 8	A	
1866	1 12 0	Statistical Accounts of Bengal, Chittagong.	Do.	2 13 10	A	
	2 8 0	Statistical Accounts of Bengal, Noakhali.	United Provinces.	1 15 0	C	
	0 15 9	Great famine prices of food grain throughout India. By R. B. Chapman.	....	..	....

Table No. III—continued.

Years.	Bengal.		Other provinces.			Remarks.
	Price per maund.	Source of information.	Province.	Price per maund.	Source of information.	
	Rs. a. p.			Rs. a. p.		
1867	..	....	United Provinces.	1 9 0	C	
1868	..	....	Do.	1 10 0	C	
1870	1 4 8	Statistical Account of Rangpur. By W. W. Hunter.	Madras	1 9 11	A	
	..	....	United Provinces.	1 12 0	C	
	0 10 4	Collector, Dinajpur	....	..	....
	0 9 0	Western Account, Dinajpur.	....	..	....
	0 10 0	Ramsankar Sen ..	....	..	....
1866-70 average.	..	....	Madras	2 2 1	A	
1871	..	....	United Provinces.	1 8 0	C	
1872	1 0 0	Statistical Account of Bengal, Murshidabad, Midnapore and Rangpur (Hunter).	Madras	1 10 5	A	
			United Provinces.	1 13 6	C	
1873	..	....	United Provinces.	1 13 6	C	
1874	0 14 0	"Jessore Gazetteer" (Westland).	Madras	1 11 7	A	
	..	....	United Provinces.	1 14 0	C	
	1 13 9	(Dinajpur) Collector's Report. Famine Year.	....	..	...
1875	..	....	United Provinces.	1 5 0	C	
1871-75 average.	..	....	Madras	1 10 4	A	
1876	..	....	Do.	2 8 0	A	
	..	....	United Provinces.	1 5 0	C	
	..	....	Madras	2 8 4	B	
1877	..	....	United Provinces.	1 15 0	C	
1878	..	....	Do.	2 12 0	C	
1880	1 4 2	"Calcutta Gazette"	Madras	1 9 7	A	
	..	....	United Provinces.	1 10 0	C	
	..	....	Madras	1 9 7	B	
1881	..	....	United Provinces.	1 10 0	C	
1876-80 average.	..	....	Madras	2 3 0	A	

Table No. III—continued.

Years.	Bengal.		Other provinces.			Remarks.
	Price per maund.	Source of information.	Province.	Price per maund.	Source of information.	
	Rs. a. p.			Rs. a. p.		
1882	..	....	United Provinces.	1 9 0	C	
1885	1 13 11	Agricultural Statistics of India (Table VII).	Madras ..	1 12 9	A	
	..	....	United Provinces.	1 10 0	C	
	..	....	Madras ..	1 11 10	B	
	..	....	Do. ..	1 15 3	Agricultural Statistics of (Madras).	India
1886	..	....	United Provinces.	1 11 0	C	
1887	1 4 8	Collector's Report (Rangpur).	Madras ..	1 8 11	A	
	..	....	United Provinces.	6 6 0	C	
	1 1 8	Collector's Report (Dinajpur).	Madras ..	1 8 10	B	
1888	..	....	United Provinces.	1 15 0	C	
1890	1 7 7	Agricultural Statistics of India.	Madras ..	1 15 2	A	
	..	....	United Provinces.	2 8 0	C	
	..	....	Madras ..	2 0 0	B	
1891	..	....	United Provinces.	2 1 0	C	
1892	..	....	Madras ..	2 5 3	A	
	..	....	United Provinces.	2 1 0	C	
	..	....	Madras ..	2 3 10	B	
1894	..	....	United Provinces.	2 1 0	C	
1895	..	....	Madras ..	1 13 11	A	
	..	....	United Provinces.	2 1 0	C	
	..	....	Madras ..	1 14 0	B	
	..	....	Bombay ..	2 0 0	Bombay Settlement Report of Khed-taluk and Ratan-giri.	C
1897	..	....	United Provinces.	3 0 0	C	
1898	1 12 0	"Calcutta Gazette" (after severe cyclone and famine).	Madras ..	2 1 10	A	
	..	....	United Provinces.	2 3 0	C	
	1 6 0	Allen's Settlement Report, Chittagong.	Madras ..	2 1 9	B	
1899	..	....	United Provinces.	2 1 0	C	

Table No. III—concluded.

Years.	Bengal.		Other provinces.			Remarks.
	Price per maund.	Source of information.	Province.	Price per maund.	Source of information.	
	Rs. a. p.			Rs. a. p.		
1900	..	....	Madras United Provinces.	2 9 11 2 14 0	B C	
1901	..	....	Bombay	2 1 0	Bombay Settlement Report of Khed taluk and Ratangiri.	
	..	....	United Provinces.	2 7 0	C	
1905	..	....	Madras United Provinces.	2 9 11 2 7 0	B C	
1909	2 2 5	Faridpur Settlement Report of 1904-1914.	Bombay	2 1 0	Bombay Settlement Report of Khed taluk and Ratangiri.	
	..	....	United Provinces.	2 15 0	C	
	..	....	Madras	2 14 6	B	
1910	..	....	Bombay	2 7 4	Bombay Settlement Report of Khed taluk and Ratangiri.	
	..	....	United Provinces.	2 14 0	C	
1915	..	....	Madras United Provinces.	3 1 7 3 8 0	B C	
	..	....	Bombay	2 11 9	Bombay Settlement Report of Khed taluk and Ratangiri.	
1917	..	....	United Provinces.	3 0 0	C	
1919	4 8 9	Agricultural Statistics of India.	Madras	5 14 4	B	
	..	....	United Provinces.	5 6 0	C	
	..	....	Bombay	5 12 3	Government of India Statistics.	
1920	4 8 10	Agricultural Statistics of India.	Madras	5 1 5	B	
	..	....	United Provinces.	5 10 0	C	
	..	....	....	5 14 9	Agricultural Statistics of India.	
1922	..	....	United Provinces.	4 15 0	C	
1925	4 2 11	Agricultural Statistics of India.	Madras	4 8 2	B	
	..	....	United Provinces.	4 12 0	C	
1929	4 14 0	Settlement Officer's Report, Rangpur.	Madras	3 13 0	B	
	..	....	United Provinces.	4 8 0	C	
1932	1 11 4	Agricultural Statistics of India. (Year of depression.)	Madras	2 5 4	B	
1935	2 1 9	Ditto	Do.	2 8 4	B	
1936	2 3 7	Settlement Report, Rangpur.	....	..	....
	1 8 0	Settlement Report, Dinaipur.	....	..	....
	1 10 0					

N. B.—"A" Land Revenue Policy of Government of India, 1902 (Madras).

"B" Marjoribank's Report (Madras).

"C" Agricultural prices in United Provinces.

Table No. IV.

Total area sown under different crops, their average yield and prices.

	Area in thousand acres.	Normal yield in thousand maunds.	Total value in thousand rupees.	Average normal yield in maunds per acre.	Average price per maund.
1	2	3	4	5	6
					Rs. a.
Paddy ..	25,675	482,032	978,584	18.8	2 0
Wheat ..	169	1,514	4,816	9.0	3 3
Barley ..	171	1,638	4,217	9.6	2 9
Gram ..	445	4,244	12,474	9.5	2 15
Other food crops including					
pulses ..	2,254	20,853	60,019	9.3	2 14
Linseed ..	179	1,110	4,184	6.2	3 12
Til ..	136	875	3,326	6.4	3 13
Rape and Mus- tard ..	1,013	7,353	31,850	7.3	4 5
Sugarcane ..	182	9,467	33,727	52.0	3 9
Jute ..	2,296	38,109	165,537	16.6	4 5
Tobacco ..	158	1,917	12,904	12.1	6 12
Condiments and spices ..	290	..	18,322	..	63 3 per acre.
Betel ..	23	..	6,849	..	300 0 per acre.
Fruits and vege- tables ..	1,380	..	81,996	..	60 0 per acre.
Miscellaneous ..	673	..	14,482	..	21 8 per acre.
Total ..	35,044		14,33,297		

N. B.—(1) The value in column 4 has been calculated on the basis of adopted normal yield and prices of crops shown separately for each district in Tables II, except for paddy of which prices have been taken at a uniform rate of Rs. 2 per maund in case of aman and Re. 1-12 per maund for aus and boro, plus Rs. 2 per acre for straw in each case. Condiments and spices have been valued at Rs. 60 to Rs. 65 per acre, betel at Rs. 300, fruits and vegetables at Rs. 60 and miscellaneous crops generally at Rs. 20 per acre.

(2) It will be seen that the average yield in column 5 is in no case greater than the normal yield in maunds per acre as determined by the Agricultural Department on the basis of the last two Quinquennial Crop Cutting Experiments ending with 1930-37:—

Paddy.	Wheat.	Gram.	Pulses.	Linseed.	Til.	Rape and mustard.	Sugar- cane.	Jute.
18.8 (aman) ..	9.6	10.1	10.8	6.7	7.0	7.0	54.0	16.9

(Vide Quinquennial Crop Cutting Report, 1932-33—1936-37 and Season and Crop Report of Bengal, 1937-38.)

(3) The area in column 2 is the total area sown including areas which are cropped more than once. The net cultivated area is 28,940 thousand acres. Hence the value of crops per net acre cultivated is Rs. 50.

Table No. V.

Production and consumption of paddy.

District.	Population as per Census of 1931 (in thousands).	Production of paddy (thousand maunds).	Consumption at standard rate of 9 maunds per head (thousand maunds).
1	2	3	4
Bakarganj	2,939	31,054	26,451
Bankura	1,112	12,373	10,008
Birbhum	948	12,873	8,532
Bogra	1,086	12,321	9,774
Burdwan	1,576	18,032	14,184
Chittagong	1,797	14,741	16,173
Dacca	3,433	16,955	30,897
Darjeeling	320	965	2,880
Dinajpur	1,755	31,913	15,795
Faridpur	2,362	19,458	21,258
Hooghly	1,114	9,777	10,026
Howrah	1,099	4,381	9,891
Jalpaiguri	983	16,085	8,847
Jessore	1,671	20,213	15,039
Khulna	1,626	19,216	14,634
Malda	1,054	9,489	9,486
Midnapore	2,799	32,296	25,191
Murshidabad	1,371	11,887	12,339
Mymensingh	5,130	46,615	46,170
Nadia	1,530	13,908	13,770
Noakhali	1,707	15,076	15,363
Pabna	1,446	13,474	13,014
Rajshahi	1,429	18,618	12,861
Rangpur	2,595	30,735	23,355
Tippera	3,110	25,011	27,990
24-Parganas	2,714	24,569	24,426
Total	48,706	482,032	438,354

N. B.--The table does not include Chittagong Hill Tracts and Calcutta. The estimate of production is based on adopted normal yield in Tables II. The estimate of consumption is based on the assumption that everybody gets full meals.

Table No. VI (a).

Number of estates, tenures, raiyati and under-raiyati interest, the area held in khas by each class and the average area and incidence of rent of raiyati and under-raiyati interest.

District.	Number of estate.		Number of tenures (in thousand).	Raiyati interest.	
	Revenue-paying including temporarily-settled private and khas mahal.	Revenue free.		Number (in thousand).	Area in khas (in thousand acres).
1	2(a)	2(b)	3	4(a)	4(b)
Bakarganj ..	4,219	50	426	570	1,311
Bankura ..	1,689	412	153	412	732
Birbhum ..	1,224	405	90	595	854
Bogra ..	697	41	28	318	727
Burdwan ..	5,337	904	155	991	1,217
Chittagong ..	28,392	35,380	140	691	497
Dacca ..	11,923	5,366	98	916	1,422
Dinajpur ..	1,053	179	60	861	1,853
Faridpur ..	6,495	169	222	840	1,164
Hooghly ..	3,220	1,109	33	227	369
Howrah ..	1,089	118	39	314	254
Jalpaiguri ..	266	262	53	104	611
Jessore ..	2,776	235	182	887	1,084
Khulna ..	1,254	66	123	427	980
Malda ..	869	193	18	458	998
Midnapore ..	2,919	2,304	170	1,551	2,010
Murshidabad ..	2,548	302	72	856	1,016
Mymensingh ..	40,796	1,627	140	1,127	2,892
Nadia ..	2,590	357	100	714	1,273
Noakhali ..	1,728	292	36	196	430
Pabna ..	2,199	62	33	418	923
Rajshahi ..	1,914	110	41	661	1,236
Rangpur ..	734	456	64	799	1,362
Tippera ..	3,725	280	87	579	1,278
24 Parganas ..	2,182	323	162	811	1,316
Darjeeling ..	193	167	5	90	162
Total ..	102,031	51,169	2,730	16,413	27,971

N.B.—The figures for column 2 (a) were taken from the Land Revenue Administration Report. The figures for column 2 (b) were supplied by the Collectors; all other figures were collected from the District Settlement Reports.

Table No. VI (a)—concluded.

Number of estates, tenures, raiyati and under-raiyati interest, the area held in khas by each class and the average area and incidence of rent of raiyati and under-raiyati interest.

District.	Raiyati interest.		Under-raiyati interest.			
	Average area per interest.	Incidence of cash rent per acre.	Number (in thousand).	Area in Khas (in thousand acres).	Average area per interest.	Incidence of cash rent per acre.
1	4(c)	4(d)	5(a)	5(b)	5(c)	5(d)
		Rs. a.				Rs. a.
Bakarganj ..	2.4	4 8	79	82	1.03	7 4
Bankura ..	1.92	2 1	94	67	.7	2 3
Birbhum ..	1.47	3 14	69	21	.31	6 4
Bogra ..	2.49	2 14	86	65	.75	8 5
Burdwan ..	1.26	3 15	127	40	.31	7 11
Chittagong ..	.82	4 11	145	69	.47	5 6
Dacca ..	1.57	2 13	34	19	.55	5 7
Dinajpur ..	2.29	2 7	194	122	.63	5 12
Faridpur ..	1.5	2 9	240	133	.55	3 13
Hooghly ..	1.82	7 7	61	44	.73	14 0
Howrah ..	.89	8 3	82	28	.33	18 8
Jalpaiguri ..	5.9	2 5	64	83	1.8	3 1
Jessore ..	1.78	2 8	892	494	.55	3 14
Khulna ..	2.8	3 6	273	220	.80	5 4
Malda ..	2.30	2 4	61	29	.47	5 10
Midnapore ..	1.36	3 15	155	99	.64	5 14
Murshidabad ..	1.27	3 7	185	75	.40	5 12
Mymensingh ..	2.7	2 14	113	124	1.1	4 11
Nadia ..	2.03	2 7	344	182	.52	4 8
Noakhali ..	2.43	4 4	42	45	1.07	6 10
Pabna ..	2.30	3 1	63	40	.63	5 10
Rajshahi ..	2.11	3 3	278	160	.57	5 14
Rangpur ..	2.37	3 0	595	535	.90	7 0
Tippera ..	2.28	3 2	39	46	1.16	6 11
24 Parganas ..	1.9	5 13	451	253	.56	11 1
Darjeeling ..	1.8	2 5	28	18	.64	3 0
Total ..	1.89	3 5	4,794	3,093	.64	6 3

Table No. VI (b).

Mokarari raiyati holdings.

District.	Number.	Area in acres.	Rental in rupees.
1	2	3	4
Bakarganj	2,150	6,060	18,903
Bankura	6,799	174,434	502,046
Birbhum	71,426	159,108	539,593
Bogra	9,328	39,758	84,085
Burdwan	10,629	32,552	90,891
Chittagong	8,492	4,826	29,034
Dacca	6,987	9,034	19,590
Dinajpur	70,218	282,801	555,579
Faridpur	42,224	86,916	209,569
Hooghly	106,132	121,339	822,891
Howrah	48,242	53,316	381,667
Jalpaiguri .. ..	..	12,795	15,110
Jessore	48,342	189,626	258,145
Khulna	38,989	132,098	317,189
Malda	20,633	58,299	95,624
Midnapore	73,746	169,976	616,242
Murshidabad	95,501	169,541	498,563
Mymensingh .. ..	..	12,961	19,239
Nadia	81,876	326,565	599,712
Noakhali	24,850	44,171	229,536
Pabna	18,491	52,838	98,859
Rajshahi	7,054	22,072	51,606
Rangpur	19,015	57,208	136,788
Tippera .. ..	..	28,253	106,243
24-Parganas	223,978	270,393	1,036,852
Darjeeling .. ..	..	..	..
Total .. ..	..	2,516,940	7,332,956

N. B.—The table shows that Mokarari raiyats hold about 8 per cent. of the total area of 310 lakh acres of land held by all classes of raiyats. The total rental of Mokarari raiyats is a little less than 6 per cent. of the total raiyati rental of the province.

Table No. VI (c).

Rent-free lands.

District.	Rent-free tenures.		Rent-free raiyati.	
	Number of holdings.	Area (acres).	Number of holdings.	Area (acres).
1	2		3	
Bakarganj	32,397	7,612	4,247	3,897
Bankura	3,643	14,154	66	28
Birbhum	59,372	49,288	50,579	57,246
Bogra	12,526	8,072	..	..
Burdwan	81,643	75,738	130,784	110,053
Chittagong	2,012	1,103	4,102	2,910
Dacca .. ..	..	10,271	..	4,362
Dinaipur	19,269	98,787	11,124	17,106
Faridpur	36,572	7,300	1,993	4,291
Hooghly .. ..	..	..	..	..
Howrah	28,662	14,857	34,170	27,229
Jalpaiguri .. ..	..	15,624	..	3,205
Jessore .. ..	..	257,870	..	..
Khulna	34,831	17,889	41	28
Malda	6,607	5,219	3,516	4,594
Midnapore	78,444	3,703	50,428	34,651
Murshidabad	47,196	29,767	24,488	20,183
Mymensingh	53,022	125,328	..	..
Nadia	51,076	55,480	78	110
Noakhali	2,464	2,052	..	..
Pabna	17,308	21,573	613	478
Rajshahi	22,462	26,559	125	76
Rangpur	21,880	10,101	3,239	4,965
Tippera	15,436	10,489	..	..
24-Parganas	79,413	32,484	19,817	14,907
Total	706,235	901,320	339,410	310,319

N. B.—(1) In all earlier settlements, no distinction was made between rent-free tenure-holders and rent-free raiyats. All rent-free lands were recorded as rent-free tenures.

(2) There are altogether 27 lakhs of tenures of all kinds out of which 7 lakhs are rent-free with a total area of 9 lakhs. This shows that the majority of them are very small in size. The total rent-free area is 12 lakh acres which is about 4 per cent. of the total area let out to raiyats.

Table No. VII.

Statement of revenue and assets.

District.	Revenue (in lakhs).	Raiyati assets [cash rent <i>plus</i> valuation of produce rent (in lakhs)].	Estimated assets of khas culti- vated lands of proprietors and tenure- holders (in lakhs).	Total assets (in lakhs).
1	2	3	4	5
Bakarganj ..	30.08	70.09	19.75	89.84
Bankura ..	4.98	31.07	3.46	34.53
Birbhum ..	10.43	34.32	2.51	36.83
Bogra ..	4.93	24.46	2.55	27.01
Burdwan ..	30.43	45.10	2.91	48.01
Chittagong ..	15.44	26.68	8.39	35.07
Dacca ..	6.65	48.42	4.27	52.69
Dinajpur ..	15.34	48.15	8.36	56.51
Faridpur ..	7.62	47.52	4.07	51.59
Hooghly ..	9.34	30.77	15.17	45.94
Howrah ..	4.54	21.88	1.03	22.91
Jalpaiguri ..	15.05	11.79	3.53	15.32
Jessore ..	8.96	39.28	3.70	42.98
Khulna ..	9.23	46.65	5.23	51.88
Malda ..	4.81	23.48	.56	24.04
Midnapore ..	26.51	95.65	12.08	107.73
Murshidabad ..	10.83	38.07	2.33	40.40
Mymensingh ..	9.30	94.59	7.13	101.72
Nadia ..	9.87	40.65	2.80	43.45
Noakhali ..	12.33	27.19	14.45	41.64
Pabna ..	5.29	32.01	1.99	34.00
Rajshahi ..	10.28	51.19	3.88	55.07
Rangpur ..	10.25	59.85	2.79	62.64
Tippera ..	11.98	42.20	7.65	49.85
24 Parganas ..	23.49	96.82	8.83	105.65
Darjeeling ..	3.88	4.16	.62	4.78
Total ..	311.84	1,132.04	150.04	1,282.98

N. B.—(1) The figures for revenue have been taken from Land Revenue Administration Report (1936-37). It is not the case that the figures in column 5 represent exactly the assets out of which the revenue in column 2 is paid. There are estates in almost every district having lands in other districts, the assets of which are shown under those districts. Further the income from minerals and from the khas lands, which are not cultivated, is not shown, e.g., forests, fisheries, tanks, bamboo clumps.

(2) Produce rents have been valued at Rs. 1-12 per maund.

(3) Khas cultivable lands of the proprietors and tenure-holders were determined in the following way :—
20 per cent. was deducted from the total raiyati area on account of homestead and other uncultivated lands.

This gave the cultivated raiyati area. This was deducted from the total cultivated area of the district to obtain the khas cultivated area of the proprietors and tenure-holders. It was then valued at raiyati rate as in cess valuation.

The assets for khas lands were also calculated by two other methods :—

(1) At one-fourth the average raiyati rate in respect of all khas lands whether culturable or not. This gives the assets as 131.60 lakhs. This method was adopted by the Revenue Department in 1928-39.

(2) At half value of gross produce on 5 per cent. of the total khas area as in (1) assuming that only 5 per cent. of the area is cultivable and it is let out on barga system. This gives the assets as 184.50 lakhs.

The total of column 4 is nearly the mean between the figures obtained by the above two methods. So it has been adopted.

Table No. VIII (a).

Statement of cultivated area and gross agricultural produce per acre and per head of agriculturist.

District.	1	2	3	4	5	6	Gross agricultural produce (in rupees).	
							Per acre.	Per head of agriculturists.
							7(a)	7(b)
Bakarganj	..	1,553	2,091	402	3.86	82,335	53	39
Bankura	..	797	581	123	6.48	28,981	36	40
Birbhum	..	765	568	127	6.02	30,956	40	52
Bogra	..	723	776	141	5.13	35,034	48	40
Burdwan	..	1,080	722	176	6.14	44,558	41	54
Chittagong	..	632	892	182	3.47	34,999	55	39
Dacca	..	1,305	2,155	399	3.27	77,495	59	35
Dinajpur	..	1,923	1,362	257	7.48	89,812	47	64
Faridpur	..	1,197	1,633	314	3.81	67,225	56	41
Hooghly	..	534	516	120	4.45	27,511	52	53
Howrah	..	239	376	77	3.10	12,069	50	32
Jalpaiguri	..	708	383	81	8.74	32,097	45	84
Jessore	..	1,410	1,064	213	6.62	61,997	44	58
Khulna	..	1,115	1,312	219	5.09	46,366	42	36
Malda	..	847	663	123	6.89	38,446	45	54
Midnapore	..	1,994	1,945	414	4.82	77,463	39	39
Murshidabad	..	941	834	174	5.41	39,341	42	47

Mymensingh	2,661	3,524	597	4.46	163,032	61.	•	46
Nadia	1,279	879	195	6.56	54,381	43	•	55
Noakhali	720	1,211	216	3.33	40,742	57	•	30
Pabna	835	801	146	5.72	44,450	53	•	45
Rajshahi	1,249	1,075	224	5.53	60,433	48	•	56
Rangpur	1,611	2,012	347	4.64	100,036	62	•	47
Tippura	1,304	2,400	436	2.99	75,541	58	•	31
24-Parganas	1,407	1,372	259	5.43	64,445	46	•	43
Darjeeling	121	74	16	7.56	3,553	29	•	48
Total	28,940	31,221	5,978	4.84	1,433,298	50	•	46

N. B.—(1) If the agricultural labourers be excluded, the area per family will be about 7 acres.

(2) The total value of Rs. 1,433 million in column 6 includes Rs. 200 million as the value of the produce of 4 million acres of khas cultivable lands of the proprietors and tenure-holders which may be assumed to be held under the barga system. Thus deducting half of Rs. 200 million as well as the raiyati rental of Rs. 113 million the balance of Rs. 1,222 million is left with the actual cultivators.

(3) If rent receivers are included in column 3, the gross produce per head of agricultural population will be Rs. 43.

Table No. VIII (b).

Distribution of areas held by a family.

District.	Number of families enquired into.	Total area held by them.	Average area per family in acres.	Percentage of families with—					
				Less than 2 acres.	2—3 acres.	3—4 acres.	4—5 acres.	5—10 acres.	Above 10 acres.
1	2	3	4	5(a)	5(b)	5(c)	5(d)	5(e)	5(f)
Bakarganj	804	1,752.66	2.17	61.8	13.1	9.1	3.9	10.9	1.2
Bankura	670	5,479.86	8.17	53.7	8.9	7.8	4.5	14.8	10.3
Birbhum	727	3,375.58	4.64	15.1	10.1	7.4	8.5	19.2	8.2
Bogra	464	1,984.45	4.28	34.5	14.2	13.6	12.7	17.9	7.1
Burdwan	803	4,759.15	5.63	28.6	10.9	8.9	10.8	26.6	12.8
Chittagong	690	1,693.95	2.45	60.3	10.1	8.8	5.8	10.7	4.3
Dacca	508	1,082.27	2.13	62.4	11.6	6.1	6.1	5.1	3.5
Dinaipur	1,020	6,512.22	6.38	24.2	8.9	11.1	10.2	28.3	15.0
Faridpur	1,104	1,796.54	1.63	81.5	7.6	3.4	1.8	2.6	0.6
Hooghly	595	2,228.09	3.74	32.4	13.1	13.0	10.9	18.8	10.2
Howrah	336	1,186.30	3.53	53.2	14.3	5.1	4.5	17.5	5.4
Jalpaiguri	530	4,645.06	8.76	5.3	6.0	10.9	16.4	33.2	20.4
Jessore	1,073	5,133.74	4.78	28.5	10.3	9.6	9.8	27.1	13.6
Khulna	356	1,701.68	4.78	55.6	7.8	9.0	6.1	13.9	7.6
Malda	332	1,107.93	3.34	54.2	7.8	8.4	6.9	15.9	6.8
Midnapore	1,110	4,693.64	4.23	38.2	16.1	10.9	10.5	17.6	6.7
Murshidabad	1,178	5,070.62	4.30	38.3	10.1	9.3	7.5	16.9	7.7
Mymensingh	931	3,597.55	3.86	34.1	13.9	11.9	10.5	16.9	6.5
Nadia	830	4,008.57	4.83	16.8	9.6	10.8	10.1	20.3	11.8

Noakhali	502	1,208.43	2.41	65.3	12.1	7.8	3.4	4.2	2.8
Pabna	701	1,673.28	2.39	64.1	9.2	5.8	4.1	7.1	2.4
Rajshahi	1,018	5,617.84	5.52	31.8	9.3	9.7	9.1	25.5	14.6
Rangpur	1,193	7,964.30	6.67	24.6	15.3	13.4	10.6	21.4	11.2
Tippura	950	2,112.91	2.22	63.9	13.7	8.6	4.3	6.6	2.9
24 Parganas	1,174	5,083.42	4.33	56.5	10.7	8.6	4.7	10.9	7.2
Total	19,599	85,470.04	4.36	46.0	11.2	9.4	8.0	17.0	8.4

N. B.—The figures have been compiled from enquiries made by Kamngos, especially employed for the purpose, in typical villages in each district.

Table No. VIII (c).

Number of raiyati and under-raiyati interests held by the cultivating families.

District.	Number of families enquired into.	Percentage of families holding the raiyati and under-raiyati interests.					
		One interest.	Two interests.	Three interests.	Four interests.	Five interests.	Over five interests.
1	2	3(a)	3(b)	3(c)	3(d)	3(e)	3(f)
Bakarganj	804	42.3	23.7	12.6	9.7	6.1	3.5
Bankura ..	670	41.6	15.8	9.3	8.1	4.6	20.2
Birbhum ..	727	36.2	19.8	11.2	7.5	4.8	20.1
Bogra ..	464	40.3	26.1	12.9	8.2	4.7	7.8
Burdwan ..	803	30.7	10.4	11.8	9.3	8.3	29.4
Chittagong	690	62.2	14.1	9.1	6.1	4.2	4.3
Dacca ..	508	58.7	18.5	6.1	4.9	3.7	2.6
Dinajpur ..	1,020	23.9	18.9	15.7	11.6	6.7	19.3
Faridpur ..	1,104	62.4	13.9	7.5	3.8	3.2	6.8
Hooghly ..	595	22.8	18.9	13.8	9.0	9.2	26.3
Howrah ..	336	41.3	21.4	11.6	6.3	4.5	14.9
Jalpaiguri ..	530	33.9	15.2	6.6	3.3	4.3	3.1
Jessore ..	1,073	20.9	18.6	11.7	10.2	7.8	29.6
Khulna ..	356	39.1	23.7	18.3	7.8	4.2	6.1
Malda ..	332	60.5	18.1	6.9	4.3	5.1	5.1
Midnapore	1,110	31.0	23.8	13.7	13.1	5.4	13.0
Murshidabad	1,178	35.7	16.4	11.8	8.9	6.8	20.4
Mymensingh	931	41.2	22.2	11.7	9.0	5.8	2.4
Nadia ..	830	30.8	22.4	14.3	9.1	7.4	10.2
Noakhali ..	502	48.8	15.1	14.1	7.0	6.8	3.2
Pabna ..	701	46.3	18.2	9.8	6.9	2.1	9.4
Rajshahi ..	1,018	25.7	16.4	12.4	9.5	7.9	28.1
Rangpur ..	1,193	21.1	15.9	13.1	7.7	6.6	23.9
Tippera ..	950	52.1	19.5	12.1	5.1	4.1	7.1
24 Parganas	1,174	34.5	22.6	10.4	5.7	5.2	19.3
Total ..	19,599	37.1	18.7	11.8	8.1	5.8	15.2

N. B.—The figures have been compiled from enquiries made by Kanungos, especially employed for the purpose, in typical villages in each district. 3.3 per cent. of the families have no raiyati or under-raiyati interest.

Table No. VIII (d).

Distribution of families living as bargadars and agricultural labourers and the rate of agricultural wages.

District.	Number of families enquired into.	Living mainly or entirely as bargadars.		Living mainly or entirely on agricultural wages.		Rate of agricultural wages.	
		Number.	Percent-age.	Number.	Percent-age.	Harvesting season.	In other season.
1	2	3(a)	3(b)	4(a)	4(b)	5(a)	5(b)
						As. p.	As. p.
Bakarganj	804	57	7.1	190	23.6	4 9	2 9
Bankura ..	670	44	6.6	165	24.6	3 6	2 6
Birbhum ..	727	94	12.9	288	39.6	3 9	2 9
Bogra ..	464	62	13.4	119	25.6	4 0	2 6
Burdwan ..	803	219	27.2	322	40.0	5 9	3 6
Chittagong	690	12	1.8	80	11.6	6 0	3 9
Dacca ..	508	35	6.9	113	22.2	4 3	..
						+food.	
Dinaipur ..	1,020	141	13.8	230	23.5	3 0	2 6
Faridpur ..	1,104	263	23.8	173	15.7	5 6	4 0
Hooghly ..	595	165	27.7	145	24.3	6 0	4 0
Howrah ..	336	91	27.1	105	31.2	6 0	4 0
Jalpaiguri	530	140	26.6	22	4.1	4 9	3 9
Jessore ..	1,073	45	4.2	85	7.9	4 3	3 3
Khulna ..	356	47	13.2	149	41.9	5 3	3 3
Malda ..	332	62	18.7	132	39.8	2 9	2 9
Midnapore	1,110	73	6.5	277	24.9	4 0	3 0
Murshidabad	1,178	128	10.9	482	40.8	2 9	2 9
Mymensingh	931	67	7.3	187	20.0	3 3	..
						+food.	
Nadia ..	830	56	6.7	300	36.1	3 3	2 9
Noakhali ..	502	11	2.2	90	17.9	4 3	2 9
Pabna ..	701	183	26.1	107	15.2	5 3	4 0
Rajshahi ..	1,018	133	13.0	243	23.8	4 0	2 9
Rangpur ..	1,193	228	19.1	154	12.9	3 9	2 3
Tippera ..	950	10	1.1	46	4.8	4 3	2 9
24-Parganas	1,174	22	18.7	204	17.3	4 9	3 9
Total ..	19,599	2,388	12.2	4,408	22.5	4 3	3 3

N.B.—The figures have been compiled from enquiries made by Kanungos, especially employed for the purpose, in typical villages in each district. In the area under enquiry it appears that 22.5 per cent. of the families live entirely as agricultural labourers as against 20.2 per cent. in the Census of 1931.

Table No. VIII (c).

The manner in which lands are cultivated.

District.	Total cultivated area enquired into.	Cultivated.					
		By family member.		By bargadars.		By labourers.	
		Area. 3(a)	Percentage. 3(b)	Area. 4(a)	Percentage. 4(b)	Area. 5(a)	Percentage. 5(b)
I	2						
Bakarganj	1,230.83	681.21	55.3	549.62	44.7	316.21	20.0.
Bankura	1,578.63	891.60	50.8	460.82	29.2	1,189.73	42.5
Birbhum	2,799.12	915.40	32.7	693.99	24.8	54.48	3.2
Bogra	1,696.07	1,371.05	80.8	270.54	16.0	801.09	21.8
Burdwan	3,668.24	1,944.06	53.0	923.09	25.2	159.69	10.0
Chittagong	1,599.80	1,248.94	78.1	191.17	11.9	148.99	16.2
Dacca	921.00	560.65	60.9	211.36	22.9	706.30	13.6
Dinajpur	5,208.52	3,748.04	72.0	754.18	14.5	123.38	8.1
Faridpur	1,516.55	1,220.28	80.5	172.89	11.4	103.58	4.8
Hooghly	2,142.09	1,385.40	64.8	653.11	30.5	80.26	9.2
Howrah	868.63	584.88	67.3	203.49	23.4	143.46	3.7
Jalpaiguri	3,379.38	2,731.87	70.4	1,004.05	25.9	269.19	6.6
Jessore	4,085.33	2,914.58	71.3	901.56	22.1	17.23	2.1
Khulna	819.48	391.12	47.7	411.08	50.2	11.05	1.2
Malda	938.35	837.65	89.3	89.65	9.6	1,042.78	29.9
Midnapore	3,486.38	1,848.42	53.0	595.18	17.1	656.39	13.3
Murshidabad	4,287.38	2,526.35	58.9	1,104.64	25.8		

Mymensingh	..	3,083.08	2,411.57	78.2	317.85	10.3	353.66	11.5
Nadia	..	2,596.12	1,590.09	61.2	625.30	24.1	380.73	14.7
Noakhali	..	948.44	668.98	70.5	158.96	16.8	120.50	12.7
Pabna	..	1,393.18	1,080.51	77.6	270.50	19.4	42.17	3.0
Rajshahi	..	4,507.26	3,653.05	81.0	676.91	15.0	177.30	3.9
Rangpur	..	5,558.15	4,010.23	72.2	1,265.02	22.8	282.90	5.1
Tippura	..	1,680.70	1,185.87	70.6	208.66	12.4	286.17	17.0
24 Parganas	..	3,173.04	1,621.41	51.1	707.51	22.3	844.12	26.6
Total	..	63,665.75	41,933.21	65.9	13,421.13	21.1	8,311.41	13.1

N. B.—The figures have been compiled from enquiries made by Kamungos, especially employed for the purpose, in typical villages in each district.

Table No. VIII (f).

The manner in which the raiyati area transferred during last 12 years is cultivated.

District.	Total area acquired into.	Transferred during last 12 years.		Transferred area cultivated.			
		Area.	Percentage.	By purchaser's family.	By bargadars.	By labourers.	By under-tenants.
Bakarganj	1,752.66	99.97	5.7	56.09	43.88		
Bankura	5,479.86	368.05	6.7	48.47	77.06	36.99	205.53
Birbhum	3,375.58	226.34	6.7	46.32	92.82	87.20	11.76
Bogra	1,984.45	59.23	3	28.37	18.60	50	
Burdwan	4,759.15	185.83	3.8	82.32	65.36	38.15	
Chittagong	1,693.95	164.90	9.7	79.97	20.50	5.42	59.01
Dacca	1,082.27	53.46	4.9	23.31	22.86	5.99	1.30
Dinajpur	6,512.22	250.84	3.8	147.31	87.23	16.13	.17
Faridpur	1,796.54	120.19	6.6	90.79	24.53		4.87
Hooghly	2,228.09	60.83	2.7	29.93	25.72	5.18	
Howrah	1,186.30	24.29	2.02	7.29	16.80	.20	
Jalpaiguri	4,645.06	439.96	9.4	66.06	185.59	14.93	173.38
Jessore	5,133.74	437.05	8.3	102.14	136.35	13.32	179.24
Khulna	1,701.68	72.63	4.2	31.56	41.07		
Malda	1,107.93	77.02	6.9	48.51	17.95		10.56
Midnapore	4,693.64	349.64	7.4	120.03	175.81	39.14	14.66
Murshidabad	5,070.62	638.74	12.5	127.95	152.65	1.00	357.14
Mymensingh	3,597.55	201.93	5.5	88.78	105.33		7.82

120

Nadia	4,008.57	877.50	21.8	570.24	172.00	27.60	107.66
Noakhali	1,208.43	65.74	5.5	63.42	2.06	.26	
Pabna	1,673.28	65.76	3.8	51.23	14.53		90.31
Rajshahi	5,617.84	196.78	3.5	68.62	37.85		144.35
Rangpur	7,964.30	380.60	4.7	80.60	144.92	10.73	15.72
Tippura	2,112.91	99.39	4.2	59.65	10.41	13.61	64.07
24 Parganas	5,083.42	412.68	8.1	133.15	190.41	25.05	
Total	85,470.04	5,923.35	6.9	2,252.11 or 38 per cent. of transferred area.	1,882.29 or 31.7 per cent. of transferred area.	341.40 or 5.7 per cent. of transferred area.	1,447.55 or 24.6 per cent. of transferred area.

121

N.B.—The figures have been compiled from entries made by Kamugos, especially employed for the purpose, in typical villages in each district.

Table No. IX.

Statement of cultivated and irrigated areas.

Provinces.	Total area in lakhs of acres.	Net cultivated area.		Area cropped more than once.		Area irrigated.		
		In lakhs of acres.	Percent- age of total area.	In lakhs of acres.	Percent- age of net culti- vated area.	By Gov- ernment canal (in lakhs of acres.)	By private sources (in lakhs of acres).	Percent- age of net culti- vated area.
	1	2(a)	2(b)	3(a)	3(b)	4(a)	4(b)	4(c)
Bengal (1)	463	289	62.4	61	20.1	1	17	6.2
Bihar and Orissa	531	246	46.8	52	21.1	9	45	22.0
Bombay and Sind	791	329	41.6	14	4.3	37	19	17.0
Central Provinces	639	248	39.0	27	10.9	..	11	4.8
Madras	911	331*	36.3	48	14.8	37	74	33.5
Punjab	644	273*	42.6	44	16.9	98	49	54.0
United Provinces	725	358*	48.0	78	21.8	32	78	30.7

N.B.—(1) In the case of Bengal the cultivated area has been taken from Settlement Statistics. On the basis of Government of India Statistics the average for 5 years ending 1935-36 is 234 lakh acres of which 48 lakh acres are cropped more than once.

(2) The figures for other provinces have been taken from the Agricultural Statistics of the Government of India as average for the 5 years ending with 1935-36.

(3) Area irrigated from Government canals in the Central Provinces is included under private sources.

(4) *In the Commission's tour proceedings, the figures of cultivated area as supplied by the Governments are :—

31.7 million acres in Madras,

31 million acres in the Punjab,

35 million acres in the United Provinces,

and the area irrigated by Government canals as 11.8 million acres in the Punjab and 3 million acres in the United Provinces.

Table No. X.

Incidence of revenue in the different Provinces.

Name of Provinces.	Incidence per acre on total area.				Incidence per acre of cultivated area.			
	Perma- nently- settled.	Tempo- rarily- settled.	Govern- ment managed or raiyat- wari.	Average.	Perma- nently- settled.	Tempo- rarily- settled.	Govern- ment managed or raiyat- wari.	Average.
	2(a)	2(b)	2(c)	2(d)	3(a)	3(b)	3(c)	3(d)
	As. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1								
Bengal	9 2	0 12 5	1 15 1	0 11 3	0 14 9	1 4 0	3 1 10	1 2 0
Bihar and Orissa	4 4	0 13 10	..	0 5 7	0 7 10	1 3 4	..	0 10 4
Bombay and Sind	..	0 10 0	1 5 6	1 4 9	..	2 7 0	1 11 3	1 11 6
Central Provinces	..	0 7 1	1 0 10	0 9 8	..	0 13 5	1 8 0	1 0 10
Madras	10 8	..	1 15 0	1 10 5	0 14 4	..	2 9 0	2 3 0*
Punjab	..	1 4 4	..	1 4 4	..	1 13 5	..	1 13 5*
United Provinces	15 3	1 2 7	..	1 2 6	1 8 6	1 13 5	..	1 13 4*

N.B.—(1) The revenue demand for Bengal has been taken from the Land Revenue Administration Report (1936-37) and it has been assumed that the percentage of cultivated area is the same in all classes of estates. But actually there is more unassessed land in temporarily-settled and Government estates than in permanently-settled estates.

The figures for other provinces have been taken from the Agricultural Statistics of India (1932-33), Volume I.

(2) *During the Commission's tour in Madras, Punjab and the United Provinces the incidence of revenue per acre was ascertained to be Rs. 2-3-6 in Madras; Re. 1-9 in the Punjab; and Re. 1-8 in the permanently-settled areas and Re. 1-11 including remissions, in the temporarily-settled areas of the United Provinces.

Indian Land-System
Ancient, Mediaeval and Modern
(With Special Reference to Bengal)

By

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Instructions for diacritical marks.

अ॒=ā

इ॒=ī

उ॒=ū

ॠ=ṛi

ॡ=ṛa

च॒=cha

छ॒=chha

ॠ=ṛa

ॡ=ṛa

थ॒=ṭha

ड॒=ḍa

ढ॒=ḍha

ण॒=ṇa

श॒=śa

ष॒=ṣha

ॠ=ṛi

ॡ=ṛ



PART I

ANCIENT

Principle of Private Property.—Since the beginning of history, Society in India has been based on the principle of private property and of private property in land. The principle is recognised in the *Rigveda* which is the earliest document of Indians, and, indeed, of all mankind. For the Hindus, it is also the most authoritative document. The *Rigveda* is recognised as the root of the entire tree of Hindu thought in all its branches and off-shoots. What is known as Hinduism is a complex of many systems, schools, and sects, but all these have sprung out of the seeds of thought embedded in the *Rigveda* as the One in the Many. There may be points of profound and wide divergence between the many sects of Hinduism which are notorious for their multiplicity and divergence, but they all move and develop their differences within the orbit or ambit marked out by Vedic thought. Any ideal or institution which is approved in the *Rigveda* becomes at once an integral part of the Hindu's national history which cannot incorporate or permanently retain any anti-Vedic elements. The *Veda* or *Śruti* is the source of Hindu Law or *Smṛiti*.

Vedic evidence: Individual Holdings measured and separated by boundaries.—

The *Rigveda* uses many expressions indicative of individual ownership of land. Such ownership, of course, implied the existence of separate plots, of plots separated and measured out from one another by well-defined boundaries. The *Rigveda* (VII, 49, 2) thus mentions plots carefully measured out from one another. Such a separated plot it calls a *Kshetra* and the boundaries marking out one plot from another are called *Khilyas* (X, 33, 6; III, 31, 15; V, 62, 7; I, 110, 5). Such plots were also objects of acquisition and conquest. The term *Kshetra-jesha* (I, 33, 15) means "acquisition of land". The term *Kshetrā-sā* (IV, 38, 1) means "gaining land". The term *Kshetram-jaya* means "conquering cultivated land," (*Maitrāyaṇi Saṁhitā* II, 2, II). There is also the significant expression *Kshetrasya Pati*, "Lord of the Field" in *Rigveda* (IV, 37, 1. 2; VII. 35, 10; X. 66, 13). In the *Atharvaveda* and later Vedic Works the sense of separated fields is clearly marked (Av, II, 29, 3; XIV, 2, 7; *Śatapatha Brāhmaṇa*, I. 4, 1, 15, 16, etc.). There are also used expressions like *Kshetrasya Patnī* (Av II, 8, 5), "Mistress of the Field", *Kshetrānām patih*, "Lord of Fields" (*Vājasaneyi Saṁhitā* XVI, 18). "It is thus a fair conclusion from the evidence that the system of separate holdings already existed in early Vedic times" (Macdonell and Keith in *Vedic Index*, I. 211). The *Śatapatha Brāhmaṇa* (VII, 1, 1, 8) refers to the case of a Kshatriya who, with the consent of the people, "gives a settlement to a man; that is, presumably assigns to him a definite *Kshetra* for his own, probably measured out, as recorded in *Rigveda*, I, 110, 5" [*Ib.*].

Acquisition and Inheritance of Holdings.—*Urvarā* is, like *Kshetra*, the Vedic term to indicate “ploughland”. The maiden *Apālā* in a hymn of Rigveda (VIII, 91, 5) compares her father’s field to his head of hair to point out how it was his personal possession. It is a clear reference to individual ownership in land for the plough. We, accordingly, also find references to fertile fields (*apnasvatī*) and waste fields (*ārtanā*) (*Rv.* I. 127, 6). Private property in land led to its purchase and sale as an object of commercial transactions, as indicated in the terms already cited, and also in terms like *Urvarā-sā*, or *Urvarā-jit* “winning fields” (*Rv.* IV, 38, 1 and VI. 20, 1; II, 22, 1; IV, 38, 1). Land, as private property, is already the subject of inheritance. It is thus spoken of in the Rigveda (IV, 41, 6, etc.) in the same connection as children. The *Chhāndogya Upanishad* (VII, 24, 2), accordingly, includes among examples of wealth fields and houses (called *āyatanāni*). The *Taittirīya Saṁhitā* (III. 1, 9, 4,) tells the story of Manu’s division of his property by which his son Nābhānedishṭa was deprived of his share for his absence from home, but compensation is later given to him in the shape of cattle.

Absence of Communal Holdings.—All this evidence points to the position that Indian Society at its start was organised on the basis of private property in land. “There is no trace in Vedic Literature of communal property in the sense of ownership by the community of any sort, nor is there mention of communal cultivation” (Macdonell and Keith, VI, I. 100). The extent of communal control and ownership of land probably applied to what was ‘no man’s land,’ the grass land (called *Khila* or *Khilya*, as cited above) which served to separate one plot from another and was used as village common for purposes of pasture for cattle.

Agriculture the Mark of an Aryan.—The real reason for allowing private property in land was the stimulus it gave to the growth of Agriculture as the first stage of economic and social progress. Agriculture was the key-industry of India in the earliest recorded time, the Vedic age, as now. The magic of property turns sand into gold in all ages and climes. Agriculture became the mark of the Aryan in India. The *Panchaviṁśa Brāhmaṇa* (XVII. 1) applies the term *Vṛātya* to those Hindus who were outside the pale of Brahmanism and are described as not following the Aryan occupation of Agriculture.

Progress of Vedic Agriculture : Manure, Irrigation.—The evidence shows that Agriculture had made rapid progress in Vedic India. Some of its details may be of interest even in modern times. *Manure* was used in cultivation (*Sākan* and *Karisha*). Cowdung (*Karisha*) was used (*Śatapatha Br.* II. 1, 1, 7) as well as the natural manure of animals (*Av.* III. 14, 3·4; XIX. 31, 3). Irrigation was known (*Khinitra*). Water was drawn out of a well in buckets (*Kośa*) tied to leather strings (*varatrā*) pulled round a stone-pulley (*aśma-chakra*) (*Rv.* X. 101, 7; 5·6). The water thus raised was led off into broad

channels (*Sūrmi sushirā*) for irrigation (VIII. 69, 12). The water for irrigation also came from lakes (*hrada*) and canals (*Kulyā*) (III. 45, 3; X. 99, 4).

Plough and Bullocks.—The plough (*Lāṅgala* or *Śīra*) was drawn by oxen in teams of 6, 8, or 12 (*Rv.* VIII. 6, 48; X. 101, 4; *Av.* VI. 91, 1; *Kāṭhaka Samhitā*, XV. 2) or even 24 (*Kāṭhaka Sam. Ib.*). The furrow was called *Sitā* (*Ib.* XX. 3).

Stages of Cultivation.—Agricultural operations are described as "ploughing, sowing, reaping and threshing" (*krishantah, vapantah, lunantah, mṛṇantah*) (*Śatapatha Br.* I. 6, 1, 3). The ripe grain was cut with a sickle (*Dātra* or *Sriṇi*), bound into bundles (*Parsha*) (*Ib.* VIII. 78, 10; X. 101, 3; 131, 2) and beaten out on the floor of the granary (*Khala*) (*Rv.* X. 48, 7). The grain was then separated from the straw and refuse by a sieve (*Titau*) or a winnowing fan (*Sūrpa*) [*Rv.* X. 71, 2; *Av.* XII. 3, 19) (*palāvān apa-vich*); XI. 1, 12 (*tushair vi-vich*)]. The winnower was called *Dhānyākṛit* (*Rv.* X. 94, 13). The grain was measured in a vessel called *Ūdara* (*Ib.* II. 14, 11), and by a weight, "bushel," called *Sthivi* [*Ib.* X. 68, 3; X. 27, 15 (*sthivimant*, "provided with bushels")].

Variety of Crops.—The grain grown is called *Yava* and *Dhānya* (*Rv.* I. 117, 21; VI. 13, 4). The *Bṛihadāranyaka Upanishad* (VI. 3, 22) mentions 10 kinds of cultivated (*grāmyāni*) grain, viz., Rice and Barley (*Vrihi-Yavaḥ*), Beans (*Mudga, Māsha*), Sesamum (*Tila*) and other grains known as *Aṇu, Khalva, Godhūma, Nivāra, Priyaṅgu, Masūra, Śyāmāka*.

Agricultural Seasons.—Agricultural seasons are mentioned: Barley, sown in winter, ripened in summer; Rice, sown in the rains, ripened in autumn; Beans and Sesamum ripened later, in winter. There were two harvests (*Sasya*) a year [*Taittirīya Samhitā*, VII. 2, 10, 2; V. I, 7, 3]. The winter crop was ripe and ready by the month of Chaitra (*Kaushitaki Brāhmaṇa*, XIX. 3).

Pests.—Agriculture was troubled by Pests. Moles destroyed seeds, birds and various kinds of reptiles (*Upakvasa, Jabhya, Tarda, Pataṅga*) ate into the tender shoots. There were also the devastating locusts. Crops also suffered from excessive and deficient rainfall (*Rv.* X. 68, 1; *Av.* VI. 50. 142; VII. 11).

Picture of a Village.—We may now draw up a picture of the Vedic village called *Grāma*. The village as a settlement is contrasted with the forest, *Aranya*. Domesticated animals and plants are distinguished from those living or growing wild in the woods (*Rv.* X. 90, 8). The domesticated animals of the village were the *Bulls* and *Oxen* for drawing ploughs and carts; *Horses* for drawing chariot and racing; *Dogs* used for hunting, for guarding and tracking cattle, sheep, goats and asses, and for keeping watch at night (*Rv.* IV. 15, 6; VIII. 22, 2; VII. 55, 3). Villages were apart from or close to one another, and were connected by roads (*Śatapatha Br.* XII. 2, 4, 2; *Chhāndogya Upanishad*, VIII. 6, 2). They contained *Granaries* (*Bṛihadāranyaka Upanishad*, VI. 3, 13) which invited raids or forays for cattle (*Gcristi*) (I. 91, 23). The ears

of cattle were marked for ownership (vi. 28, 3). In the evening the cattle were driven back to the village from their grazing grounds in the forest (X. 149, 4) called *Goshṭha* (I. 191, 4) by the herdsman *Gopāla* armed with a goad (X. 60, 3) who had to see that they did not fall into pits, or break limbs, or were not lost or stolen. Larger villages were known and called *Mahāgrāma* (*Jaiminīya Upanishad Brāhmaṇa*).

Land Tenure.—The Village was based on individual tenure of land, as already pointed out. It generally meant tenure by a family rather than by an individual person. The village itself was the aggregate of families called *Griha* or *Kula*. The unit of social formation was the family comprising several members living under a common head, the father, or eldest brother, called the *Kulapa* (Rv. X. 179, 2) in the same house called *Griha* (III, 53, 6 ; II 42, 3) which was large enough to accommodate not merely the entire joint family but also its cattle (VII. 56, 16) and sheep (X. 106, 5) returning at night from their grazing grounds called *Vraja* (II. 38, 8).

Land-grants by King.—It is difficult to ascertain the exact kind of legal relationship that existed between the individual proprietor of land and the Sovereign or the State. The expression *Grāma-Kāma* is frequently met with in later Vedic Works (*Taittirīya Samhitā*, II, 1, 1, 2 ; 3, 2 ; 3, 9, 2 ; *Maitrāyaṇi Samhitā*, II. 1, 9 ; 2 3 ; IV. 2, 7 ; etc.) probably to indicate the applicants for villages or lands, thus pointing to the sovereign's prerogative over villages. But such prerogative extended only to fiscal obligations which might be modified. These land-grants of the King created the landlords and depressed the position of the actual cultivators of land who were thus turned into tenants. The King made these land-grants as the owner of all the land of his territory.

Partition.—Landed property, like other property, was a subject of Inheritance even in these early days, showing how Vedic Society was founded upon the system of individual holdings. The Vedic word for inheritance is *Dāya* and the heir is called *Dāyāda* (*Śatapatha Br.* XII. 4, 3, 9 ; *Nirūkta*, III. 4). References to division of property by father among his sons are found in the *Taittirīya Samhitā* already cited, and in the *Aitareya Brāhmaṇa* (V. 14) as well as *Jaiminīya Brahmana* (III. 156). In the last case, four sons divided among themselves the property of their father who was still living. Such division of property at first began with movable property and cattle and then extended to immovable property as the available amount of arable land became more and more restricted.

Landlords.—It is thus clear from the above Vedic evidence on Land-Tenures that the earliest Indian Society was organised on the basis of individual proprietorship of land which vested in the family and was divisible by inheritance and partition among its legal heirs. There is no trace in the Vedas of the conception of the family as a collective landowning corporation, much less of communal ownership of land. It is always the head of the family who owned

the land, and could transmit his rights to his heirs. Of course, the King was always the "lord of all," as Manu says (VIII. 39), but the distinction between the political rights of the Crown and the individual rights of ownership was understood in these early days. Some of the *Brāhmaṇas*, as we have seen, record gifts of land made by Kings to their preceptors as the earliest examples of land transactions in India, but, though these might have been actual gifts of land made by the King as proprietor, they were in most cases grants of a superiority, creating India's first landlords, as pointed out above.

Vedic Society had its own aristocracy, the rich nobles who were called *su-jāta*, "of high birth," "possessed of wealth" and worthy of the Sabha (*rayiḥ sabhāvān* and *sabheya* or *sabhāsaha*) (IV. 2, 5; VII. 1, 4; II. 24, 13). The Sabha was the Council of Elders. The nobles are also called *Maghavan*s. According to the *Āitareya Brāhmaṇa* (VII. 29), these nobles were Kshatriyas who were the landholders of those days while the *Vaiśyas* were the tenantry. The *Vaiśya* is described as *anyasya balikṛit*, i.e., as one paying tax or rent to his superior. Grants of land came to the Kshatriyas as gifts in reward of their conquests from their Kings.

We have dwelt at length on the Vedic Land-system, because it served as the model for later times.

Epic Evidence : Rural Conditions.—The great Epics, the *Rāmāyaṇa* and *Mahābhārata*, do not contain much direct evidence on Land-system or Agriculture, but we have important and interesting indirect evidence pointing to its background and the political system controlling it. Epic India is made up of the following units of settlement in an ascending series : (1) *Ghoshā* or Cattle-ranch also called *Vraja* ; (2) *Palli*, a small non-Aryan settlement (*Mbh.* XII. 326, 20) ; (3) *Durga* or Fort or Garrison to protect the rural settlements ; (4) *Grāma*, or village proper growing round the *Durga* as its nucleus ; (5) Towns called *Kharvata* and *Pattana* ; and (6) *Nagara* or city. This hierarchy of settlements was administered by a hierarchy of officials. At the foundation of the structure was the village headman, *Grāmaṇi*, who was to protect the village under his charge up to a distance of 2 miles in each direction. Above in order were the Lords of 10 (*Daśagrāmī*), 20 (*Vimśatipa*) and 100 (*Śatagrāmī*) villages, under the chief (*Adhipati*) who controlled 1,000 villages. These several authorities received revenue assessed by the Adhipati, the returns of crime, and passed them on from one to the next higher, till revenues and reports focussed in the King, the lord of all. This traditional decimal system of administration is also described in the later *Smṛitis* or Law-books (e.g., *Manu*, VII. 115-125 ; *Yājñavalkya* I. 321). Each local area was self-governing in this scheme, provided it paid its revenue as assessed by the Overlord.

There is one interesting passage throwing light on Pasture and Agriculture, the two important rural industries : "One should receive the milk of one cow for the care of 6 cows ; and if he tend a hundred head he should, at the end of the year, receive as his remuneration 1 pair. If he works for the master as

overseer of his flocks or in agricultural labour, he should have 1/7 of the proceeds or increase, but in the case of small cattle, a small part (1/16; *Mbh.* XII. 60, 24f).

The troubles of the Agriculturist are stated to be six, a standardised number: (1) Flood, (2) Drought, (3) Locusts, (4) Mice, (5) Birds and (6) War (6 *Ib.* III. 279, 35).

Evidence of Buddhist works: Rural India of Fifth Century B.C.—These works picture early conditions from fifth century B.C. and are very valuable for the concrete facts and details they give.

Village.—The *Jātakas* picture villages as consisting of families numbering from 30 to 1,000.

The village was a cluster of dwellings enclosed by a wall or stockade with gates (*grāma-dvāra*).

Beyond this enclosure lay the arable land of the village, the *Grāma-Kshetra*, which was itself protected from pests, beasts, and birds, by fences, snares, and field watch-men.

Additions to the arable land came from fresh clearings of forest land.

Holdings.—The village land under cultivation was made up of individual holdings separated from one another by channels dug for co-operative irrigation.

Sometimes, co-operation led to conflict. The river Rohinī which separated the Śākya from the Koliyas had its waters stored up by a dam for purposes of irrigation for both the peoples whose disputes had to be settled by the Buddha himself.

The dividing ditches, rectangular and curvilinear, which separated the cultivated fields of Magadha (Bihar) suggested to the Buddha the picture of the monk's uniform which was a patchwork of torn pieces of cast-off clothing (*Vinaya Texts*, II. 207-9).

Non-cultivating Landholders.—A Holding was small enough to be managed by a family who, however, sometimes employed hired labour for cultivation. The idea held up in the Buddhist Scriptures is, however, that of the landlord not divorced from his land but cultivating it himself. A social stigma attached to the "hireling" who is ranked below the slave. A *Jātaka* laments as a symptom of social decadence the sorry spectacle of sturdy peasants leaving behind their own barns at home to toil as hirelings on the estates of the royal capitalist.

There were also large Holdings. We read of estates of 1,000 *Karīṣas* (probably acres) and more, farmed by Brahmans, and of one estate being cultivated by as many as 500 ploughs with hired labourers (*bhatikā*) to plough and bullock.

Village Common.—Beyond the arable land of the village lay its common grazing grounds or pastures for its herds of cattle and goats. King and commoner had an equal right to the village common. A common Neatherd

was employed by the whole village. His duty was to pen the flocks at night or to return them to their owners by checking by counting heads. He was called *Gopālaka*, "protector of flocks." The pasturage was changed from day to day.

Suburban Groves.—Besides Pastures, Villages had suburban groves which were generally the abodes of ascetics for their life of meditation in solitude. Thus grew up the famous Veluvana of Rājagṛha or Jetavana of Śrāvastī where *Vihāras* or Monasteries were located for the Buddha and his *Samgha*.

Jungles.—The village ended in the uncleared jungles, the sources of its firewood and litter, and also the haunts of wild animals and brigands preying upon caravan traffic passing through them.

Taxes on Agriculture.—Village communities were made up of individual peasant proprietors whose rights to land were limited only by the demands of the State. Such demands were of different forms such as the following :—

(1) *Tithe* on raw produce realised in kind at the barn doors or by survey of the crops under an official (*Mahāmātra*) or measured out by the village syndic or headman (*Grāma-bhojaka*) himself.

An Inscription of Asoka (c. 250 B.C.) refers to the taxes called *Bali* and *Bhāga* (share of the produce) which the village Lumbinī (now in Nepal Tarai) had to bear until the king remitted the former completely and reduced the latter to 1/8 (*Ubalike Kaṭe aṭha-bhāgiye cha*) out of regard for the fact that the village was the place where the great Buddha was born and hence a most sacred place.

The sovereign could, of course, remit, reduce, or give away in charity these tithes and taxes. We read in the Buddhist books of such gifts made by a king or queen to a daughter at her marriage, to a minister, a Brahman, or a merchant.

(2) Special levy on produce for purposes of provision in State granaries against emergencies like war or famine.

(3) Forced labour. We read of peasant proprietors providing deer-preserves for their king to escape from his summons to beat up game for him at the cost of their own work.

(4) Occasional exactions like "milk-money" presented by his people to a king at the birth of an heir to him.

(5) Sovereign's right to forest lands and "ownerless" estates [See for references my *Hindu Civilisation* (Longmans, London), pages 296-299.]

Bargadars.—Though Buddhism did not allow any property or possessions to the Bhikṣhu or Monk, it allowed the *Samgha* or the Monastery as a whole to possess property including lands for cultivation. But cultivation was not a legitimate pursuit for the monk or the brotherhood. A religious text has

the following injunction : "A Monk who digs the earth or causes it to be dug is liable to punishment." But this injunction was relaxed to some extent in the case of the brotherhood owning land which was cultivable, and needing its produce for their maintenance. The following interesting passage occurs, for instance, in the *Mahāvagga* : "Of seedlings belonging to the *Samgha* grown upon private ground, half the produce, O Bhikkhus, you may have, when you have given a part to the private owner. Of seedlings belonging to a private person, grown upon ground, the property of the *Samgha*, you may have the use, when you have given a part to the private owner." This points to the system whereby seedlings were divided equally between the owner of the seeds and of the land on which the seeds were sown. The Buddhist *Vihāras* were generally possessed of extensive grounds for the cultivation of which they had to employ agricultural labourers by allowing them half of the produce as their remuneration. The compound of the *Vihāra* was called *Ārāma* which was in charge of an officer on the staff of the *Vihāra*, who was called *Ārāmika* or Park-keeper. It is stated that the Emperor Bimbisāra of Magadha of about sixth century B.C. placed at the disposal of the venerable Monk, Pilinda-Vachchha, 500 such *Ārāmikas* who by themselves constituted a village called *Ārāmikaḡāma*. This *Ārāmika* was not himself a monk but a trained agriculturist who could organise the cultivation of the lands owned by the *Vihāra* for purposes of its support on the basis of half-share of produce. The *Ārāmika* as the Superintendent of the grounds would also guard the entrance of the *Vihāra* against disturbing visitors to the monks (See pages 413, 440 of my *Ancient Indian Education*).

We have an interesting description of the actual working of the Bargadari system in Agriculture by an eye-witness, the Chinese scholar, I-tsing, who spent more than 12 years (673-685 A.D.) in India as a student of Buddhism. He states : "According to the teaching of the *Vinaya*, when a cornfield is cultivated by the *Samgha* (the Brotherhood or community), a share in the product is to be given to the monastic servants or some other families by whom the actual tilling has been done. Every product should be divided into 6 parts, and $\frac{1}{6}$ should be levied by the *Samgha* ; the *Samgha* has to provide the bulls as well as the land for cultivation. Sometimes the division of the produce should be modified according to the seasons.

"Most of the Monasteries follow the above custom, but there are some who are very avaricious and do not divide the produce, but the priests themselves give out the work to servants, male and female, and see that the farming is properly done." (Takakusu's Translation, page 61, Oxford.)

This shows that cultivation was by Bargadars as well as hired labourers or paid servants. In the latter case, the proprietor made more profit.

The Hindu Law-Books of the period also contemplate non-cultivating landlords letting out land in cultivation against a share of the produce [*Āpas-tamba*, I. 6, 18 (20) ; II. 11, 28(1)].

Evidence of Hindu Law-Books: Manu ; Village Public Works.—The typical and most authoritative evidence is that of Manu. A village in his time offered to rural folks many amenities mentioned as follows : (1) Wells (*Kūpa* or *Udupāna*), (2) Tanks (*Taḍāga*), (3) Ponds (*Sara*), (4) Reservoirs (*Vāpi*), (5) Fountains (*Prasravaṇa*), (6) Embankments (*Setu*), (7) Groves (*Upavana*), (8) Parks (*Ārāma*) [III. 201-3], (9) Cowpens accommodating up to 1,000 cows in individual or collective ownership [XI. 127] and (10) Pasture-grounds (*Parīhāra*) of average width of 600 feet open to the entire cattle of the village [VIII. 237-8].

Agriculture.—According to Manu, Agriculture depended on three factors : a knowledge of (1) seeds, (2) varieties of soil and (3) qualities of soil. The genuineness of seeds was guaranteed by penalty [IX. 330 ; 291]. The crops grown included Cotton, Barley, Wheat, Rice, Mudga-beans, Sesame, Māsha, Sugarcane, and vegetables [IX. 39]. Two harvests were usual, spring, and autumn [VI. 11].

Agricultural implements included wooden plough tipped with iron [X. 84], yoke for cattle, rope, and leathern vessel for irrigation from wells (IX. 293).

Cultivation was by hired labour on the basis of stipulated terms, such as half the share of produce to the cultivator [*ārdhika*, IV. 253] who had to supply the seeds.

The royal share was 1/4, 1/8, 1/12, according to quality of soil [VII. 130].

The State was to ensure proper cultivation by penalties [VIII. 243].

Arthaśāstra of Kauṭilya.—This work gives the most comprehensive and detailed account of ancient Indian Land-system and Agriculture. The value of the work is due to the precision of its language in the style of a legal treatise ; to its author who was responsible for the establishment of the Maurya Empire under Chandragupta in about 323 B.C., and thus had a direct and intimate knowledge of actual administration ; and to the age of the work which, though not precisely dateable, contains an account of conditions resembling that of Megasthenes for Mauryan India.

Settlement.—There are interesting injunctions regarding the duties of the State as Landlord. The State is to establish villages of a minimum size of 100 and maximum 500 families.

It also organised Unions of villages. A Union of 800 villages forming the Greater Village (*Mahāgrāma*) was technically called a *Sthānīya*, a centre of trade and livelihood where the villagers of the neighbourhood would meet.

Next came the Unions of 400 villages called *Dronamukha*, 200 villages called *Kārvaṭika*, and 10 called *Samgrahaṇa*.

The State is to grant lands free of rents and taxes to those whose services the village needs, viz., (1) those who conduct religious ceremonies, (2) teachers, (3) priests and (4) men of learning.

Such grants of land were also made to village officers in lieu of salaries*. The scale of salaries payable to the rural officers of different grades in the shape of grants of land is thus fixed in both Manu's *Smṛiti* [VII. 119] and the *Mahābhārata* [XII. 87, 6-8]: The Lord of 10 villages is to be given 1 *Kula* of land, defined to be "as much land, as can be cultivated with 12 oxen"; the lord of 20 villages, 5 *Kulas*; of 100 villages, 1 entire village; and of 1,000 villages, 1 entire town.

The village officers are mentioned as (1) Superintendents of villages (*Adhyaksha*), (2) Accountants (*Samkhyāyaka*), (3) Gopa, (4) Sthānika (rural officials of different grades), (5) Veterinary Surgeons (*Anikastha*) for the treatment of rural cattle, (6) Horse-trainers and (7) persons going far out of their village in pursuit of livelihood (*Jaṁghākarika*). These grants of lands were subject to the condition that it would not be alienated by sale or mortgage (*vikrayāādhāna-vajram*).

Land made fit for cultivation is to be settled on rent for the life of the cultivator. Land not fit for cultivation is not to be taken away from those who are making it fit.

Non-cultivation of land will render it liable to confiscation. The State must settle land to profit with those who can pay rent, e.g., the village merchants (*Grāmahritaka-vaidehaka*).

The State should encourage cultivation by grant of seeds, cattle, and cash, so that cultivators may be enabled to make it profitable and pay the dues to the State.

Favours and remissions of rent (*anugraha-parihāra*) cannot be granted to cultivators at the cost of the State.

Rural Development.—The State must take charge of rural development under a programme comprising (1) Mining and Metallurgical Works, (2) Plantation of forests to yield wood for fuel and also valuable and medicinal woods like sandal wood or scented wood, (3) Plantation of forests for elephants, (4) Grazing grounds for cattle, (5) Roads for traffic and (6) Markets for commodities carried by land and water.

The State should also make provision for rural water-supply by construction of reservoirs (*setu*) filled from a river or by rain. It should also help private persons to construct tanks by free gifts of land, passage of water, timber, and other necessary materials.

The State should also make such gifts of land and material to private persons constructing places for worship and rest for the public (*Punya-sthānū* and *Ārāma*).

*It may be noted that this system of payment to high officers of State of their salaries in the form of grants of land continued for a long period. For instance, even in India under Harsha, the great Emperor (c. 605-650 A.D.), it has been observed by the Chinese traveller, Yüan Chwang, that the Emperor set apart a fourth of the crown lands for the endowment of great public servants [see my *Harsha* (Oxford), page 97f].

The State should enforce supply of stipulated contributions in the shape of labour and bullocks towards any co-operative undertakings decided on by the village, on payment of due expenses for it.

The sovereign has rights over what grows in the public tanks (*setushu*), whether fish, ducks, or aquatic plants.

A village must not be provided with pleasure-gardens or halls for purposes of dramatic performance, dancing, vocal music, concerts, buffoons and bards, disturbing the work of helpless agriculturists.

The State must protect agriculturists from exacting fines, free labour, and rents or taxes.

A village had its flower-gardens, orchards (*pushpa-phala-vāṭa*), clusters of trees such as lotus or bamboo (*shaṇḍa*), and paddy-fields (*kedāra*) [II. 1; IV].

Village Planning.—Apart from its arable land, a village should have its other land distributed for purposes of (1) Pastures for the grazing of its cattle; (2) Sylvan retreats for religious study and practices (*Brahma-Somāraṇya*) and for ascetics (*Tapovana*); (3) A reserved forest for royal hunt “where wild animals like tiger, elephant, and bison, will be let loose with their teeth and claws cut off”; (4) Ordinary forests for the shelter of all animals; (5) Plantations of different kinds of forest growing different kinds of forest produce such as Timber-forests, Bamboo forests, or forests of bark-producing trees; (6) Factories for utilisation of forest-products; (7) Colonies of foresters and (8) Forests for rearing of elephants beyond human habitations.

Land Revenue.—The Revenue Department was under the control of an officer called *Samāhartā*, the Collector-General.

Its sources.—The Revenue derived from Land included the Revenue derived from the following sources :—

- (1) Khas Mahal Land called *Sītā*;
- (2) *Bhāga* or the sixth part of agricultural produce payable to the State;
- (3) *Kara*, or the levy of an impost upon the yield of orchards;
- (4) *Vivita* or a levy on pastures;
- (5) *Vartanī* or road-cess;
- (6) *Rajjū* or the Cess payable for Settlement;
- (7) *Chora-rajjū* or Chowkidari or Police Cess.
- (8) *Mines* such as those of “gold, silver, diamond, gems, pearls, corals, conch-shells, metals, salts, and other minerals extracted from earth, stone, or oil-fields (*rasa*) like mercury;”
- (9) *Setu* comprising fields or gardens producing (a) Flowers (like “*Kunkuma*”), (b) Vegetables (like “Brinjals, Cucumber”), (c) Sugar-cane, (d) Plantains and Betel-nuts (*Shaṇḍa*); (e) Crops like Rice (*Kedāra*) and (f) Spices (such as “ginger, turmeric”) (*Mūla-vāṭa*);
- (10) *Vana* or Forests including four classes of forests, those for “cattle, deer, commercial products like timber or rubber, and elephants”.

The Forests growing useful and profitable produce are thus enumerated :

- (1) *Dāruvarga* (Timber-forests); (2) *Venu-varga*, producing "bamboos" of different kinds; (3) *Vallivarga*, producing different kinds of creepers like cane; (4) *Valkala-Varga* producing different fibres such as hemp (*Śaṇa*); (5) *Rajju-bhāṇḍa*, producing ropery material such as Muñja; (6) Forests growing leaves (*pātra*) for writing such as Palm-leaf; (7) Forests producing flowers (*pushpa*) as materials for dyeing (such as *Kimśuka*, *Kusumbha* and *Kunkuma*); (8) Forests for the growth of medicinal plants (*Oushadha-varga*) yielding herbs, roots, and fruits used as medicines (*Kanda-mūla-phala*); and (9) Forests of poisonous trees (*Vishavarga*).

Among forest-produce are included the skins, bones, teeth, horns, hoofs, and tails of animals, which may be useful [II. 17].

(11) *Vraja* or cattle-breeding Farms or Stud-Farms for the rearing of useful animals like "cow, buffalo, goat, sheep, ass, camel, horse and mule;" [II. 6].

(12) *Bali*, presents to the King, a sort of *abwabs*.

Government Agricultural Farms.—The Director of Agriculture (*Sitā-dhyaksha*) was in charge of the cultivation of crown lands or Government farms. His duty was first to have a collection of seeds of the various crops to be grown such as Grain (*dhānya*), Flowers, Fruits, Vegetables (*śāka*), Herbs (*Kanda*), Roots, Fibre-producing plants (*Kshauma*) and Cotton (*Kārpāsa*).

He is to employ for cultivation the following classes of labourers : (1) Serfs, (2) Hired labourers and (3) Convicts condemned to labour.

He is also responsible for supplying these labourers with all things needed for their work of cultivation such as implements (ploughs), rope, sickle, and bullocks.

He may also employ cultivators on the basis of a half-share of the produce (*ardhāśritikāḥ*) (provided they bring their own seeds and bullocks). But those who can offer only their labour will have their share of produce reduced to 1/4 or 1/5.

Water rates.—These were 1/5 for irrigation where water is carried by hand in pitchers (*Hastaprāvartimam*); 1/4 where water is supplied by water-lifts worked by bullocks (*Skandhaprāvartimam*); 1/3 where water is supplied by channels constructed for the purpose (*Srotoyantprāvartimam*); and 1/4 where water is taken from rivers, lakes, tanks and wells.

The State is entitled to these water-rates on the ground as stated in the Text :—

Rājābhūmeḥ patir dṛiṣṭaḥ
 Śāstrajñairudakasya cha
 Tābhyāmanyattu yad dravyam
 Tatra svāmyam Kuṭumbinām

"Those who are well versed in the Śāstras hold that the King is the owner of both land and water and that the people can exercise their rights of ownership over all other things excepting these two."

Survey, Settlement, Assessment, and Collection.—The cultivated land was measured by the *Rajju*=10 *Danḍas*=40 hands, and 1 hand=54 *angulas*. Different standards of measurement were used for different kinds of land, such as military camping-grounds, timber-forests, roads and wells, revenue-free lands and the like.

As has been already stated, the cost of Survey and Settlement was charged to the proprietor of land benefitting by them.

The Revenue Department comprised three grades of officials, viz. (1) *Samāhartā*, "Collector-general," the Head of the Department, (2) *Sthānika* and (3) *Gopa*. The Province (*Janapada*) was divided into four Circles, each under a *Sthānika*. The *Gopa* was in charge of 5 or 10 villages.

Villages were grouped under three classes, Good, Middling and Bad.

Written records (*Nibandhas*) were prepared, counting villages of different descriptions such as (1) Revenue-free (*parihāraka*); (2) Contributing military service in lieu of taxes (*āyudhīya*); (3) Contributing grain, cattle, cash (*hiraṇya*), raw materials (*kupya*), and labour (*viṣṭi*) in lieu of taxes (*karapratikara*).

Thus Government had a complete knowledge of the economic value and resources of each village and the kind of contribution it made to the general welfare of the country.

When the villages were thus classified according to kind of contributions they made to the revenue and resources of the State, each individual village was further studied with reference to the following particulars which the village officer in charge called the *Gopa* was to enter in his own Record (*Nibandha*), viz.—

(1) Demarcation of villages by defined boundaries such as river, rock, and the like and ascertainment of the exact area of each village thus demarcated (*śimāvarodhena grāmāgram*);

(2) Measurement and description of plots (*Kshetra*) as (a) cultivated, (b) uncultivated and waste, (c) high, (d) wet (*kedāra*), (e) park (*ārāma*), (f) orchard (*śhaṇḍa*), (g) sugarcane-growing (*vāṭa*), (h) forests for supply of wood and fuel, (i) inhabited, covered by dwellings (*vāstu*), (j) trees for worship (*chaitya*), (k) temples, (l) irrigation works (*setu*), (m) cremation grounds, (n) alms-houses (*sattra*), (o) watering-places (*prapā-pānīyaśālā*), (p) places of pilgrimage, (q) grazing grounds (*virita*) and (r) area covered by roads.

(3) Preparation of Registers recording (a) boundaries and areas of plots, (b) area covered by forests and roads, (c) transfer by gift or sale and (d) amount of loan advanced to agriculturists and revenue remissions granted by Government.

(4) Preparation of a *Census* of Households in the village showing—

(a) the number of each house in the Register;

(b) whether it was taxed or tax-free;

- (c) composition of each household as to number of Brāhmaṇa, Kshatriya, Vaiśya, and Śūdra, living in it ;
- (d) number of cultivators (*karshaka*) herdsmen (*gorakshāka*), traders (*vaidehaka*), artisans (*kāru*), workmen (*karmakara*), serfs ;
- (e) number of men, and live-stock ;
- (f) amount contributed by each household to the State in the forms of Cash, Labour, Tolls or Fines ;
- (g) number of males, females, children, and adults in each household ;
- (h) customs of the village and the family concerned ;
- (i) domestic Budget of each family indicating its Income and Expenditure.

The preparation of these Village Records and Registers enabled Government to have a complete grip upon the condition of the countryside in all its details leaving no room for any speculation. Periodical survey of rural conditions was obviated by the Census as a standing institution.

Besides the village officer at the bottom of the scale, thus keeping record for each village under his charge, the next higher Revenue Officer, the *Sthān-nika*, in charge of one of the four districts of the Province, was also to prepare similar records and registers for his Circle.

The Revenue Minister also enforced the working of this administrative system by means of Inspectors going about the country in disguise as informers to inspect the Records and Accounts kept by the District and Village Officers regarding the cultivated fields, homesteads and families ; (a) fields under the heads of area and output, (b) households under the heads of revenue, assessed (*bhoga*) and remissions (*parihāra*) and (c) families under the heads of caste, occupation, number of members, income, and expenditure. They had also to inform themselves of the movements of the people to and from the village, of doubtful characters (*anarthyānām*) "such as dancers, actors, and the like," and of foreign spies.

Other classes of Informers will inspect the quantity and price of the various products due to the State, those from cultivated fields, orchards, forests, mines and factories.

Another set will examine the imports by land or water and the dues levied on these in the shape of toll, road-cess, conveyance-cess, military cess, ferry charges, 1/6 portion of their value payable by merchants, the charges for their living and the accommodation of their goods in Government warehouses (*paṇyāsālā*).

Informers in the guise of Ascetics were set to watch the activities of cultivators, herdsmen, merchants and heads of Government Departments (*Adhyakshas*). "In places of trees worshipped, where four roads meet, at solitary places, in the vicinity of tanks, rivers, bathing-places, at centres of pilgrimage, at hermitages, in desert tracts, on hills, and in thick forests, Informers in the guise of old and notorious thieves with their followers will be set to ascertain the causes of arrival and departure, and halt, of thieves, enemies, and outlaws."

In addition to the Inspectorate, there were also Revenue Commissioners called *Pradeshtāras* to inspect regularly the work of their subordinate Revenue Officers in the districts.

Land Revenue according to other Smritis.—The King's share of agricultural produce is called *Bali* in later texts and is assessed at different rates. *Vasishtha* (I. 42) and *Vishnu* (III. 22, 23) fix it at the uniform rate of 1/6. *Gautama* has three rates, 1/6, 1/8, 1/10 in accordance with the quality of the soil as good, middling and bad (X. 24). *Manu* mentions 1/12 instead of 1/10 (V. 2, 130). The *Mahābhārata*, however, fixes the *Bali* generally at 1/6 (X. 2. 69. 25 ; 71. 10 ; etc.).

Cess.—Various kinds of Cesses were imposed upon the products of the village other than the produce from cultivation. *Vasishtha* (XIX. 26, 27) imposes a cess upon the use of rivers (apparently for purposes of irrigation or fisheries), dry grass, forests and hills, i.e., upon jungle products. *Gautama* (X. 27) levies a Cess on roots, fruits, flowers, medicinal herbs, honey, meats, grass, and fire wood. There is even an opinion that the king was entitled to 1/50 of cattle, cash, and clothes. The cattle-tax was probably a periodical levy upon rural livestock. *Vishnu* (III, 25) imposes Cess on the following products : meat, honey, clarified butter, medicinal herbs, scents, flowers, roots, fruits, flavouring substances, wood, leaves, skins, earthenware, stoneware and wicker-work. This schedule of taxes throws light upon the village handicrafts of the time. The cash referred to in the passage (*Hiranya*) implies that sometimes the dues from agricultural produce were not paid in kind as a share of the crops but in cash.

Village handicrafts.—India's economic life has been based from time immemorial upon a balanced development of both Agriculture and Industry. The fact was grasped from the very beginning that Agriculture by itself could not support the entire population. With its offseasons amounting to more than half the year, Agriculture by itself cannot give continuous employment even to the agriculturists themselves. That is why India through the ages has been the home of both Agriculture and Handicrafts, the villages and cottage Industries, so that between them it could employ and support its entire rural population.

A Vedic village was noted for many Handicrafts along with its Agricultural progress as described above. There was the *Carpenter* for making the chariot for war (*Ratha*) and also the draft wagon (*Anas*) and also producing fine carved work (*Rv.* X. 86, 5). There was the worker in metal called *Karmāra* who smelted the ore in fire, using bellows of bird's feathers, and made vessels of hammered metal. The village had also its *Goldsmiths* to make ornaments. There was also the village *Leatherer* who knew the art of tanning leather and made such leather goods as bow-strings, slings, thongs, reins, lash of the whip or bags. There was also the indispensable *Weaver*, working with the loom and shuttle. The *Rigveda* calls the Warp *Otu* and the woof *Tantu*. Weaving in those days was generally left to women. The *Rigveda*

tells of a family where the father was a physician (*Bhishaj*), the son was a *Rishi*, or philosopher, and his poor mother, a grinder of corn (*Upala-prakshinī*) as a dutiful housewife (See my *Hindu Civilisation*, page 75, for references).

In the *Yajur Veda* of a later period, we are told of villages with fishermen, fire-rangers, ploughers, washermen, barbers, butchers, footmen, messengers, makers of jewels, baskets, ropes, dyes, chariots, bows, smelters, smiths, potters, and so forth. There was also the village architect who constructed the fire altar of bricks and of various forms like a bird with outspread wings. There was the village boatman and ferryman. A village had also its professional acrobats and players on drum and flute. There were also traders and money-lenders and commercial magnates (*Śreshṭhī*). The woman figured in Industry as dyer (*Rajayitrī*), the embroiderer, the worker in thorns or the basket-maker.

Later Vedic literature shows the workers of various metals like gold, bronze, iron, copper, lead and tin. It also refers to the domestication of the elephant [*Ib.* pages 96, 97].

These basic handicrafts characterised the Indian village throughout. The standard legal work of Manu mentions the same crafts as the inseparable accompaniments of the village. It mentions in addition the village oilman, the tailor, the brick-kilner, the distiller and the launderer [*Ib.* page 170].

Some of the Sanskrit legal works and Buddhist texts mention the organisation of handicrafts under guilds called *Śreṇīs* and also localisation of industries. Gautama [XI. 21], for instance, mentions *Śreṇīs* of "ploughmen, traders, herdsmen, money-lenders, and artisans" and the *Jātakas* tell of 18 craft-guilds each under its own President called *Pamukha* or Elder (Alderman) called *Jeṭṭhaka*. They also mention federations of Guilds. Industries were special to certain areas. There are mentioned villages of potters, of woodrights, or of iron-smiths, serving the whole countryside with a supply of articles like razors, axes, plough-shares, goads and needles. There are also villages of trappers supplying game, skins, ivory and the like. Sometimes, industries located themselves along certain streets or in certain areas. We read of the Ivory Workers' streets in Benares, the Dyers' Street, the Merchants' Street or the Weavers' Place (*Thāna*).

Villages sold their foodstuffs at the gates of towns. We read of the sale of fish at a gate of *Sāvatti*, of green-grocery at the four gates of Uttarapañchāla and of venison at the cross-roads outside Benares where were located the *Sūnā* or slaughter houses. The city of Mithilā was served by four *Nigamas* or markets in its four suburbs.

We get in the Buddhist Texts a glimpse of the economic prosperity of the country in those days. Every village or town had its workshops and bazars. In the bazars could be had textile fabrics, groceries, oil, grain, green groceries, perfumes and flowers, works of gold and jewellery. There were shops where arrows, carriages, and other goods were kept on view for sale. There were

also Stores (called *Antarāpaṇa*). The markets also supplied strong drinks sold at the taverns (called *Pānāgāra* or *Āṇa*), poisons, meats, daggers and slaves, though dealing in these was not approved.

The rural market also gave scope to speculation or "dealing in futures". We read in the *Jātakas* of a local corner in hay and of huge profits of 200-400 per cent. We are also told of a deal where the profit was 20,000 per cent. in spite of a leakage of 1,000 coins which had to be paid out "for a carriage, a pavilion at the Benares docks, and to the men (*purisā*) and ushers (*patihāra*) who had to be satisfied."

Money-lending was approved but usury was universally condemned in Hindu *Smritis*.

Trade had its chief called *Seṭṭhi*. Different trades came under a Federation of which the chief was called a *Mahāseṭṭhi* who had *Anuseṭṭhis*, the chiefs of different trades, under him.

Agriculturists also had a chief called *Bhojaka* who represented them in matters municipal and political and was entitled to certain special dues and fines for his position.

The many rural handicrafts of ancient India are described to be as many as 64 and more in number in some Sanskrit and Prakrit Texts which give particulars about each of these *Kalās* as they are called.

Further light is thrown on the industrial progress of ancient India by the facts and figures of its trade with the Roman Empire in the early centuries of the Christian era. These are given in two works, Pliny's *Natural History* and *Periplus of the Erythrean Sea*. They relate how India in those days was draining the Roman Empire of its gold by its export trade which kept up the balance of trade in favour of India. But what India was then exporting was not the agricultural produce or food-stuffs or raw materials but manufactures, the products of her handicrafts and rural home industries. The most important of these was *Muslin* for which there was a regular rage in Rome and among its fashionable ladies who went about its streets decked in seven folds of muslin and yet appeared to be nude as if they were not properly clothed, so thin and fine was the texture of the Indian muslin. Fearing the decay of morals from this fashion of ladies, the Roman Senate passed a piece of sumptuary legislation forbidding the import and use of the Indian muslin. The other articles of India's export trade with the West comprised articles of luxury such as scents, incense, precious stones and spices, silks, muslins, and cottons. Pliny [*Natural History*, XII, 18] laments that "there was no year in which India did not drain the Roman Empire of 100 million sesterces" = £ 1,000,000 [of which £ 400,000 was directly India's share as calculated by Mommsen [*Provinces of the Roman Empire*, II, 299-300]], sending in return wares which were sold for a hundred times their original value, "so dearly do we pay for our luxury and our women." It is believed that ancient India was also foremost in the manufacture of *Steel* of which was made the famous Damascus blade

and in her *Iron* industry of which the Delhi Iron Pillar (c. 400 A.D.) is a monumental example. Another achievement of Indian industry was the production of certain cements or powders called *Vajra-lepa*, "cements strong as the thunder-bolt", which were so necessary for the temple architecture of the times, the remains of which still testify to the adamant strength of these metal or rock cements. Varāhamihira in his *Bṛihat. Saṁhitā* mentions the experts in machinery and the composition of dyes and cosmetics, and even artificial imitations of natural scents of flowers, which bulked so largely in the Indian exports to the Western world. Broadly speaking, ancient India was responsible for three great accomplishments in Applied Chemistry which built up her flourishing export trade. These were (1) the preparation of fast dyes for application to textile fabrics by the treatment of natural dyes like *Manjishṭhā* with alum and other chemicals; (2) the extraction of the principle of indigotin from the indigo plant by a process "which, however crude, is essentially an anticipation of modern chemical methods"; and (3) the tempering of steel "in a manner worthy of advanced metallurgy, a process to which the mediaeval world owed its Damascus swords" [my *History of Indian Shipping*, pages 122, 123, 180, 181 citing Sir B. N. Seal's *Positive Sciences of the Ancient Hindus*].

We need not dilate any further on these ancient Indian village handicrafts, as the account already given makes it quite clear how the village in ancient India presented a balanced economic development in which both Agriculture and Industry found their due places and how the village handicrafts had included small chemical industries too. Bengal must now recapture some of this economic history and heritage by having her agriculture supplemented by handicrafts, so that rural labour may find employment throughout the year and not remain out of work for half the year.

Evidence of Megasthenes (C. 300 B. C.).—It is interesting to note that much of the observations of Megasthenes on conditions in Mauryan India, which he had seen with his own eyes as an ambassador of the Syrian Emperor Seleucos to the court of the Indian Emperor Chandragupta Maurya, agrees with what Kauṭilya has stated for the same period. Among Government officers Megasthenes mentions some "who superintend the rivers, measure the land, and inspect the sluices by which water is let out from the main channels into their branches..." This statement confirms the administrative arrangements mentioned by Kauṭilya for cadastral survey, settlement, and collection of land-revenue, water-rates, and other dues of the State from land.

The Revenue system as described by Kauṭilya was the standard for ancient India.—The documents of later Indian History, whether texts or inscriptions, are full of technical terms used by Kauṭilya and testify to the same system of land revenue administration. We have already referred to an inscription of Asoka stating how the royal dues from a village in the shape of *bali* and *bhāga* had been respectively abolished and reduced. The *bhāga* or the

sixth share of produce payable to the king was reduced by Asoka to 1/8 as a great favour bestowed upon the village as the birth-place of the Buddha. It is supposed that perhaps the king's share was 1/4 to make the concession more generous. Megasthenes has stated that this was the king's share. Similarly, the next epigraphic landmark, the inscription of Rudradāman (c. 150 A.D.), mentions the same traditional technical terms such as *Bali*, *Bhāga*, *Kara*, *Śulka*, *Viśhti*, and *Pranaya* ("benevolences").

Land revenue in the Gupta period (c. 320-650 A. D.).—The inscriptions of the period are full of references to the grants of land made by the kings for purposes of religion, learning, and charity on conditions precisely stated and these throw light on the land revenue demands of the State. We may select for our purposes two typical inscriptions numbered 38 and 55 in Fleet's *Gupta Inscriptions* and dated A. D. 571 and 766. The first of them mentions the following sources of rural revenue :—

- (1) *Udānga* which is explained as a tax on occupancy ryots ;
- (2) *Uparika*, "a tax levied on cultivators who have no proprietary rights on soil" (Fleet), i.e., a tax levied on temporary tenants ;
- (3) *Vāta* or *Avāta* supposed to be revenue derived from waste lands ;
- (4) *Bhūta*, probably the revenue derived from what is "grown" as distinguished from what is withered (*vāta*) ;
- (5) *Dhānya*, import duties on grain ;
- (6) *Hiraṇya*, rent paid in cash ;
- (7) *Ādeya*, "what is to be surrendered" ;
- (8) *Viśhṭika*, contributions in labour ;
- (9) *Daśāparādha*, "fines from 10 offences, viz., (a) three offences of the body, theft, murder, adultery, (b) four offences of speech, words that are harsh, untruthful, libellous, and pointless; and (c) three offences of mind, coveting others' property, thinking of wrong, and devotion to what is not true ;"
- (10) *Bhoga*, contribution of fruits, firewood, flowers and other products ;
- (11) *Bhāga*, the king's share of (a) agricultural produce (*śaḍbhāga* 1/6), (b) salt (*lavaṇa* as mentioned by Kauṭilya), (c) profits of irrigation in the shape of water-rates (*udaka-bhāga*), (d) product of mines leased out to private persons, and (e) sale-proceeds of royal merchandise [Kauṭilya].

No. 55 of Fleet indicates negatively the obligations imposed by the State on a village rendered free by the king's grant: "It is not to pay taxes (*akaradāyī*); it is not to be molested by the regular troops (*bhāta*, police) and irregular troops (*chāta*); it is not to yield the increase in its cows, and bulls (a levy on livestock*); nor in its flowers, or milk, pasturage, hide, and charcoal; nor any taxes on salt or wet salt, on sale and purchase, or yield

**Apāramparaḡbolivarddha*.—This term may, however, be interpreted in the light of the allied term *apāramparabativaddagahaṇam* which indicates the obligation to supply cattle for relays in transport.

of mines ; it is not to contribute forced labour or surrender its hidden treasures and deposits." The list of these rural levies is a credit to the public finance of the times.

The Madhuban Copper-plate Inscription of Emperor Harsha (c. 605-650 A. D.) describes the king's dues from the village as (1) *Tulyameya*, taxes depending on the weights and measures of things sold and (2) *Bhāga-bhoga-kara-hiraṇyādi*, rents in kind and cash and other dues.

Survey and Settlement.—"Settlement" operations were systematised. Land was surveyed, measured, and divided into holdings called *Pratyayas* with their boundaries defined. The measurement was by *pada* or pace, i.e., roughly 2 feet. The holdings are mentioned to be of different sizes, of 105, 100, and 90 *padāvartas*, and were served by common lands called *padraka* and had in certain cases the irrigation wells called *Vāpi*, covering an area of 28 *padāvartas*. The names of all the individual proprietors of the holdings were entered in the village records, together with the boundaries of the holdings which were fixed by a separate class of officers called *Simākarmakara*. (Nos. 38 and 46 of Fleet) or *Simāpradātā* [Inscription of Bhāskaravarman in *Ep. Ind.* XII, 75]. The officer surveying and measuring the land was called *Pramātā*. There was also an officer called *Nyāya-Karaṇika* (*Ib.*), "the adjudicator who had to inspect and decide if the boundaries were properly marked out or not, and to settle all cases of dispute".

Land Revenue Administration.—Records-of-rights were prepared and kept up by the village notaries called *Pustapālas* (in the Damodarpur Copper-plate Inscriptions of the time of Kumāragupta I and Budhagupta of 5th century A.D.). The Department of Records had its clerks or scribes called *Divīras* or *Lekhakas* [Nos. 27 and 80 of Fleet] and the Documents called *Karaṇas* were kept in the custody of the Registrar called *Karaṇika*. The officer drafting the document was called *Kartri* [No. 88 of Fleet] or *Sāsayaṭri* [Inscription of Bhāskaravarman, *Ep. Ind.* XII. 75].

The duties of these Record-keepers or Sub-Registrars were to know the titles and boundaries of lands and report on these to Government in the case of lands under proposal of transfer that "the lands be given" [Damodarpur Copper-plate Inscriptions, I and II] or that "the application (for transfer of land) is a proper one" [*Ib.* III]. It was on their report that Government would sanction the sale of lands. For all transactions relating to the transfer of land, Government also consulted the local officers on the spot. These were (1) the *Mahattaras*, "the village Elders", (2) *Aṣṭa-Kulādhikaraṇas* (probably officers in charge of groups of 8 *kulas* or families in the village), (3) *Grāmikas*, village headmen, (4) *Saulkika* in charge of tolls and taxes, (5) *Gapilmika* in charge of forests, (6) *Āgrahārika* in charge of the *agrahāras* or holdings dedicated to gods or Brahmins [No. 12 of Fleet], (7) *Dhruvādhikaraṇa* in charge of land-revenue proper [No. 38 of Fleet], (8) *Bhāṇḍāgārādhikṛita*, treasurer, (9) *Talavāṭaka*, Village Accountant [No. 46 of Fleet] and (10) *Ūkheṭa-yita* or tax-collector in general [*Ep. Ind.* XII. 75].

Government in those days also associated non-officials with rural administration. The *Vishayapati* or the Divisional Commissioner administered with the assistance (*puroge samvvyavaharati*) of an Advisory Council consisting of (1) the *Nagara-Śreshṭhī*, representing the town; (2) the *Sārthavāha* representing Trade; (3) the *Prathamakulika* representing Industry and (4) *Prathama-Kāyas-tika*, the Chief Secretary representing the *Kāyasthas* or scribes as a class, as the expert in respect of the documents concerned in land-transactions. In the Madhuban Copper-plate Inscription, the Emperor Harsha announces his grant of an *Agrahāra* in the presence of the officers mentioned, as witnesses to the transactions. The composition of these rural Advisory Councils shows how the different economic interests of the village, those of Handicrafts, Trade, and Marketing were represented on it.

Post-Gupta Period.—The demands of the State or the Landlord on Land continued on traditional lines. There is, however, some evidence of a few new Cesses introduced. For instance, the following Cesses are mentioned in an inscription of Gurjara-Pratihāra Empire (c. 960 A.D.; *Ep. Ind.* III, No. 36); (1) *Khalabhikshā*, "beggings from the threshing floor"; a levy on the grain accumulated on the threshing floor; (2) *Prasthaka*, a Cess on each *prastha* measure of liquid; (3) *Skandhaka*, a Cess on each shoulder-load of goods; and (4) *Marggaṇaka*, a kind of "benevolence" levied upon a village.

The grants of the Pāla kings of Bengal (c. 8th-12th century A.D.) mention the traditional items of Revenue like *Bhāga-Bhoga-Kara*, produce-rent, *Hiraṇya* or cash-rent, and the Police-tax called *Chāuroddharaṇa* [= *Chauravarjjan* of Parivrajaka Inscriptions = *Choravarjjan* or *Choradaṇḍavarjjan* of Uchchakalpa Inscriptions = *Chorarajjū* of Kauṭilya].

An inscription of King Dharmapāla mentions the Revenue officers who were then known as (1) *Shashṭhādhikṛita*, collector of a sixth share of agricultural produce, (2) *Śaulkika*, collector of tolls and (3) *Gaulmika*, collector of customs.

We have in certain inscriptions of Kings of Assam [Balavarman, Ratnapāla and Indrapāla of c. 990-1060 A.D. (*JASB*, 1897, 1898)] mention of some illegal exactions aptly called "oppressions", the *abwabs* of those days. These exactions were due to visits to villages of members of the royal family, and government officers, "officers on tour in the track of thieves," collectors of taxes, for whom the village had to supply their various needs. The village had also to supply provisions, as is stated, for grazing of elephants on march through the country side or for crews of boats moored on its rivers.

Some inscriptions of the Gaharwar Kings of Kanouj of the 11th century [*Ep. Ind.* II, VII, VIII, X, XI, XIII, XIV; *JASB*, LVII; etc.] show some changes in the Revenue system. A grant of land is made "with the mango and *Madhuka* trees, with its metal and salt mines," and the proceeds of taxes like *Bhoga-Bhāga-Kara*, *Pravanikara*, *Turushkadanda*. *Pravanikara* was an impost levied on merchants. *Turushkadanda* was either

a tax to meet the cost of war against the invading Turks of those days, or a poll-tax levied on resident Turks. Other new Cesses mentioned are *Go-kara* (tax on cattle), *Jala-Kara* (water-rates), *Lavaṇa-Kara* (Salt-tax), *Parṇa-kara* (probably tax on leaves serving as materials for writing, like palm-leaves, or for constructing huts, *parṇa-kuṭīra*).

Inscriptions of the later Sena Kings of Bengal of c. 12th and 13th centuries introduce a new unit of land-measurement called *Nala* of 56 cubits, and also assessment of land-revenue in cash in terms of the coins of the times such as *Kapardaka* and *Purāṇa*. One Inscription [No. 9 of N. C. Majumdar's *Inscriptions of Bengal*] mentions the assessment of 15 *purāṇas* for each *droṇa* of land and the total revenue from a village amounting to 900 *purāṇas* from its total land measuring 60 *droṇas* and 17 *unmānas*. The land-measure included units called *bhūtapātaka*, *droṇa*, *ādhaka*, *unmāna* and *kāka* in a descending series. Another Inscription [No. 15 of Majumdar] refers to revenue derived from betel-leaf plantations (called *barajas*) and betel-nuts.

Land System of the South.—The principles of the Land-system are the same for north and south, with local variations as to details. As usual, the inscriptions recording royal grants of land show the various imposts levied on it. The assessment varied according to crops. Thus (1) Turmeric, ginger, onion, garlic, and the like formed one class of crops for assessment; (2) Brinjals, pumpkins, etc., formed another class; (3) a third class comprised castor-seeds, mustard, gram, wheat, paddy, etc.; (4) a fourth class comprised plantains and sugarcane; (5) a fifth class comprised the dry crops like areca, cocoanut, and jack, but they were differently assessed. We are also told that licence was required to grow red lilies in gardens, plant cocoanut trees in groves, sink reservoirs and wells, and so forth. There were other imposts like the tax on planting water-lilies, share of the water-lilies, a fourth part of the trunks of old trees, areca palms, cocoanut trees, and the like, fines for digging river channels and inundation channels, water-rates levied on water of such channels when utilised either by cutting branch channels or by means of levers or baskets; taxes on commodities like ghee or cloth; taxes on professions; on hunters, messengers, dancing-girls; weavers, with assessment varying according to looms such as lace-loom; oil-mongers, blacksmiths, gold-and silver-smiths, carpenter, potter, brazier; barber and washerman; judge and members of village council; collector of tolls; stamp duty; tax on vehicles and contributions to festivals; police-tax; taxes on oil-presses, well-diggers, toddy-drawers, shepherds, stalls, brokerage, manufacture of salt; fees on good cows and bulls. Thus the range of this rural taxation comprehended all kinds of profit and income earned within the village from agriculture, orchards, trees, handicrafts, trade, and the professions [See for references my *Local Government in Ancient India* (Oxford), pages 253-258].

Summary and Conclusions.—The ancient Hindu Land-system was based from the very beginning upon private property in land which was parcelled out among individual holdings. The head of the family was the proprietor

of such a holding which could be partitioned among his heirs, Examples of such partition are as old as the Vedas.

There is no trace in Vedic society of any communal ownership of land. Nor was the family owning such land as a corporation. The property of the family vested in its head, though his legal heirs had a potential share in the property. The communal ownership of land extended only to such land as was "no man's land", to the common land of the village serving as the grazing ground of the entire village cattle.

The Vedas know of grants of land made by the king who thus created the first landlords. These grants only prove the political and territorial sovereignty of the king which was quite consistent with the rights of private property upon which the State and Society were based. Private property in land was limited by its established obligations to the State in the shape of the dues and taxes or *balī* payable to it.

These Vedic views became the law of the land. We find the law laid down by Jaimini in his *Pūrva-Mīmāṃsā* [VI. 7, 3], stating that "the king cannot give away the earth because it is not his exclusive property but is common to all beings enjoying the fruits of their own labour on it. It belongs to all alike (*na bhūmih syāt sarvān pratyaviśiṣṭatvāt*). Sabara-Svāmī (c. 5th century A. D.) commenting on this passage says: "The king cannot make a gift of his kingdom, for it is not his, as he is entitled only to a share of the produce by reason of his affording protection to his subjects." To this Sāyaṇa adds: "The king's sovereignty consists in punishing the guilty and protecting the good. Nor is the land his property (*na rājñor bhūmī-dhanam*), for what is yielded by land as the fruit of labour on the part of all beings must be enjoyed by them as their own property (*tasyām bhūmanu svakarmaphalam bhūñjānām sarveshām prāññānām sādharmaṇam dhanam*)." The *Vyavahāra-Mayūkha* clears up this point further by pointing out that "even in the case of a conquest, the property of the conquered in their houses, lands, and other goods does not pass on to the conqueror but only the taxes due from these. The ownership of village and field belongs to their respective owners and not to the conqueror whose right is restricted to the collection of taxes (*tatgrāmakṣhetrādaṁ svatvaṁ tu tattadbhūmīkādināmeva | Rājñām tu karagrahaṇamātram*). But in purchases from the owners of land, the ownership of house, field, and the like, is transferred to the purchaser." Śrīkhaṇḍadeva in his *Pūrva-Mīmāṃsā-Darśana* [II. 317] has a similar comment: "What is acquired by conquest is the possession of a kingdom. Kingship means two things: protection of the kingdom and eradication of all obstacles to its progress. As ways and means of carrying out these objects, the king is entitled to taxes from cultivators, and to punish those who are found to merit punishment. There does not accrue to the king any other right in land from his conquest." Mādhavāchārya also comments in the same strain on Jaimini's Sūtra: "Land is not the king's property. What belongs to the king is the duty of defending his kingdom, of chastising the wicked

and protecting the good. In land lies the common wealth of all creatures who enjoy it as the fruit of their own labours."

We may note the following other features of the ancient land-system :

Government demand of land-revenue amounted usually to a sixth share of the produce.

The revenue was generally paid in kind and realised by a hierarchy of revenue-agents posted at all stages from the provincial headquarters to the village.

Revenue was paid in cash under the Sena Kings of Bengal.

There was "Survey" followed by "Settlement" and preparation of record-of-rights and of all facts of rural economic conditions in households, families, and villages.

Various cesses and exacting impositions were levied on cultivation and other economic pursuits such as handicrafts and trade. Some of these impositions anticipated the *abwabs* of later times. Kautilya (page 89) aptly calls these "oppressions" (*piḍana*). The range of taxation was wide enough to bring within its scope all possible kinds of economic activity in the village. It was a comprehensive scheme of rural income-tax. We have already seen how Kautilya taxes equally imports and exports ; levies octroi, excise, and customs duties ; has a rural tariff policy which, for instance, exempts from taxation articles required for religious ceremonies ; prohibits export of food-grains, cattle, weapons, skins [II. 21] ; and has a scheme of Prohibition. Manu prescribes taxes on the net profits of artisans and merchants [VII. 127]. The *Sukraniti* [IV. 2, 128-29] taxes usurers and money-lenders ; also building-sites, sites for shops ; and travellers for up-keep of roads.

The State used to endow religion and learning by grant of tax-free land.

Lastly, we may refer to the Census as a normal operation of administration, and its planning on a comprehensive scale so as to present a complete picture of the countryside, of rural economic life and conditions, the social composition of the village, its manners and customs, or its resources of revenue and man-power.

The grip of the central authority on rural populations and conditions in the interior was further maintained by the progresses of the army, elephant-corps, boats, royal relations, and officers of the inspectorate on prescribed tours through the country-side. The supply of provisions for these was taken as another exaction borne by the village, but its excesses and abuses were checked.

PART II

MEDIAEVAL

Moslem Rule.—The period of Moslem rule marked only a change of rulers in certain parts of India. It did not introduce much change in the indigenous institutions of the country, political, social, or economic. Physical conditions did not permit such change. The new foreign rulers had to make their way in India along the lines of least resistance. The theory of the Hindu State did not believe in centralisation of political authority or over-government of the people. It believed in the people managing their own affairs in their own way. Every village in this scheme was self-governing, as well as unions of villages. The nation in India has lived through the ages in the villages. India has been always a land of villages. Even today she has about 7 lacs of villages as against only 38 towns having more than 1 lac population each, while her entire urban population only amounts to about 11 per cent. of her total population. Thus India's civilisation has been not an urban but a rural civilisation, the product of her forests, villages, and cottages where she thought out her highest and produced the most advanced philosophical systems. The soul of her people expressed itself through her rural democracies and their manifold institutions. These rural republics functioned up to the nineteenth century until they were swept away by the onrush of the British system of centralised administration. As stated by Sir Charles Metcalfe before a Select Committee of the House of Commons in 1832 [*Report*, Volume III, Appendix 84, page 331]: "The village communities are little republics, having nearly every thing they can want within themselves, and almost independent of any foreign relations. They seem to last where nothing else lasts. Dynasty after dynasty tumbles down: revolution succeeds to revolution...but the village community remains the same...This union of the village communities, each one forming a separate little State in itself, has, I conceive, contributed more than any other cause to the preservation of the peoples of India, through all the revolutions and changes which they have suffered..." Sir George Birdwood has also similarly observed [*Industrial Arts of India*, page 320]: "India has undergone more religious and political revolutions than any other country in the world; but the village communities remain in full municipal vigour all over the peninsula." The fact is that in the Hindu scheme, Society and State were functioning like independent entities in defined spheres. Society was functioning like a State within the State, with resulting restrictions imposed upon the interference of the State. That is why we find that while political India was being harried by nearly four centuries of Moslem invasions and changes of Moslem ruling dynasties with all the unrest that it involved, the social and cultural life of India kept on uninterrupted its accustomed course and was even showing increased vigour and vitality in many new movements of thought it brought into being. The exponents of these new cultural movements were Ramananda

and Kabir, Vidyapati and Chandidas, Vallabhacharya and Chaitanya, Mira Bai, Krishnadas, Surdas, Tulsidas, Dadu, or Tukaram. These movements have also made permanent contributions to Indian culture by producing the modern Indian vernaculars through the medium of which they were carried to the masses.

Thus Moslem rule could not but take over the indigenous social and economic institutions of the country. This happened especially in the matter of the Revenue System and Administration.

Political Conditions.—The pre-Mogul Turkish Sultanate of Delhi (c. 1000-1526 A.D.) was not a homogeneous political entity. Its unity was broken up by a multitude of fiefs which functioned like independent kingdoms and served as outposts of Moslem authority against the surrounding Hindu territories. Moslem rule of this period had to come to terms with the Hindus whom it did not seek to extirpate, as has been wrongly supposed. Even Mahmud the Iconoclast employed a large Hindu cavalry force. His son Masud ordered his Moslem officers not to offend the religious susceptibilities of their Hindu comrades. He employed a Hindu officer Tilak to suppress the rebellion of Niyaltigin and made him the equal of Moslem nobles. Muizzud-din even allied himself with the Hindu King of Jammu against the Moslem ruler of Lahore, and employed Hindu legends on his coinage. In fact, "all Moslem rulers from Mahmud downwards readily accepted the allegiance of Hindu rulers and landholders and confirmed them as vassals in the possession of their hereditary lands; and one of the pretexts for Timur's invasions of India at the end of the fourteenth century was the toleration of Hinduism. Neither the numbers nor the interests of the foreigners admitted of any other course." The Moslem rule of the times was represented by garriisons scattered through the country. These islands of Moslem rule were placed in the vast ocean of India's agricultural population on whom it had to depend both for its material support and, what is more important, for the working of the machinery of rural administration. This meant that "all posts connected with the assessment and collection of land-revenue, and with accounts of public and State finance generally were filled, as they were many generations later, by Hindus." A typical feature of the new régime is thus recorded: even a blood-thirsty tyrant like Balban was received at every stage of his triumphal progress following his suppression of Tughril's rebellion by officers and citizens called *Rais*, *Chaudharis* and *Muqaddams*, of whom the first two represented the Hindu landholders, and the third, the Hindu revenue officials still so called. And the Moslem historian *Barani* tells us how even the Hindu money-lenders and usurers of those days were free to enrich themselves by plying their business with the extravagant nobles of Balban's court [*Cambridge History of India*, III, 88-90].

We may thus visualise the conditions of Moslem rule: Its executive authority was shared by the body of military fief-holders who were created for the maintenance of law and order in the country and for the collection of

the revenue due to the State by force, where necessary. Details of administration were left to the indigenous agencies of which full use was made. Hindu Accountants functioning from time immemorial were trusted to keep the Registers where was recorded in the first instance the amount of revenue which the cultivator or the landholder was liable to pay to Government. It was then left to a higher class of Hindu village officials to collect this revenue. There were, however, extensive tracts of the country outside the jurisdiction of these Moslem military fiefs. These were held by Hindu Kings or landholders. They were left in their independence on their promise to pay the stipulated tribute or taxes [*Ib.* page 45].

Khalji Tyranny.—These normal conditions were sometimes disturbed by an autocratic tyrant like Ala-ud-din Khalji. He could not brook the wealth of the hereditary Hindu officials derived from their usual percentage on revenue collections. He abolished this system and decreed that all should pay in proportion to their incomes and not a fixed charge. He raised the Government's share of the land and fixed it at half the gross produce, while heavy grazing dues were levied on cattle, sheep, and goats. These oppressive measures reduced the Hindus "to one dead level of poverty and misery, especially the hereditary assessors and collectors of revenue. Deprived of their emoluments, but not relieved of their duties, these poor creatures were herded together in droves, with ropes round their necks, and hauled, with kicks and blows, to the villages where their services were required" [*Ib.* 107].

Tughluq Land Policy.—The rule of the Tughluqs put an end to this tyranny and restored normal conditions (1321). Private property confiscated by Ala-ud-din was restored to its owners. Forts were constructed to afford protection to peasants against brigands. Canals were undertaken for irrigation. There was plantation of gardens by the State. Land revenue was reduced to its usual level of 1/10 or 1/11 of the gross produce. It was also to be assessed personally by the collectors and not to be estimated from mere reports of informers and delators. The revenue was further to be realised with due regard to the cultivator's capacity to pay. Injunction was also issued to the revenue officials that they should secure extension of cultivation to improve revenue, instead of depending on mere enhancement of the demand. These measures resulted in ruined villages restored, waste land reclaimed and area under cultivation extended [*Ib.* 128-29].

Matters further improved under the next Tughluq ruler, Muhammad (1325). He was ruling an empire comprising 24 Provinces, and one of his first acts was to order the compilation of a register of the lands, and of the revenue assessed on them, so as to establish a uniform system of land revenue throughout the empire, and to ensure that no village escaped assessment. Unfortunately, no vestige of this register can be traced [*Ib.* 139].

Example of Firuz.—The reign of Firuz Tughluq (1351-1388) marks further improvement of agricultural conditions. His first administrative measure was to appoint an Assessor of Land Revenue who, within 6 years, completed

a tour of the Kingdom and submitted a Report. Land Revenue demand was reduced so as to leave enough surplus of savings in the hands of the cultivator. The oppressive custom of levying benevolences from provincial governors both on first appointment, and annually, was abolished. Later, in 1375, Firuz also cancelled some 25 different cesses, mostly of the nature of *octroi* duties, which weighed heavily upon merchants and traders. These were the levies handed down from ancient times and accepted as traditional. The abolition of all these exactions caused a loss to the exchequer of 3,000,000 *tangas* = about £250,000, and also a fall in agricultural prices. Wheat now sold at Delhi at 8 *jitals* (=3*d.*) per *man*, and pulse and barley at 4 *jitals* (=1½*d.*). Compensation came to the exchequer from increase of revenue from lands following extension of cultivation. Thriving villages of prosperous peasantry sprang up in the fertile tracts at intervals of 2 miles and even less. As many as 1,200 garden villages grew up in the neighbourhood of Delhi, supplying its fruit-market, and bringing to the treasury an annual income estimated at 180,000 *tangas* = £15,000. The Doab, depopulated during the last reign, was speedily reclaimed, and contributed an annual revenue of about £65,000. The land revenue from Khas Mahal estates now increased to over five and half million.

But agriculture received an impetus not merely by freeing it from the burden of depressing taxation. It was improved by positive measures of irrigation for which Firuz is still remembered. A canal of a length of 150 miles carried the waters of the Jumna into the arid areas where the city of Hissar was founded. 150 wells were sunk to serve both irrigation and travellers. He is credited with the construction of 300 towns, 200 caravanserais, 100 bridges, 10 baths, 5 reservoirs and 5 hospitals.

Firuz thus set the model and led the way in agricultural improvement and rural reconstruction.

Conditions in Bengal.—The history of Bengal during this period of unrest and transition may be briefly summarised. The fall of the Gupta Empire meant troublous times for Bengal which became a prey to invasions of powerful neighbours in the seventh and eighth centuries, invasions from Kanauj under Yasovarman, from Assam (Kamarupa), by the Gurjaras under Vatsaraja and even by the Rāshtrakūṭas under Dhruvaraja. At last, conditions were stabilised by the people electing an able local chief, Gopāla by name, who founded the famous Pāla dynasty of Kings by whose administrative consolidation and political conquests Bengal became an empire (c. 765-1150 A.D.) The Pālas were supplanted by the Senas who were one of the local chiefships into which the decadent Pāla Kingdom had been split up. The Senas succumbed to the Moslems under Bakhtiar who conquered Bihar, as a general of Kutb-ud-din, the Sultan of Delhi, took Nadiya, and put to flight the Sena King Lakshana Sena in 1194 A.D. who set up in eastern Bengal at Vikrampur where ruled his son Mādhava Sen succeeded by Sū Sen, the last of the line.

Moslem Bengal.—Bengal at this time was made up of five distinct regions known as (1) *Mithilā*, west of the Mahānandā, (2) *Varendra*, north of the Pādmā and between Mahānandā and Karatoyā rivers, (3) *Rāḍha* west of the Hughli and south of the Ganges, (4) *Bāgdī*, the delta of the Ganges and Brahmaputra and (5) *Vanga* to the east of this delta. The Moslem conquest of Bengal included south-eastern parts of Mithilā, Varendra, northern part of Rāḍha and north-western part of Bāgdī. The capital of this Moslem Bengal was located at Laknawati.

Bengal was a dependency of Delhi up to the year 1338. Even before 1338, the loyalty of the Moslem Governors of Bengal to Delhi was very shaky. Remittances of revenue or tribute were seldom regular and sometimes were stopped altogether. The capital of Bengal, Gaur or Laknawati was called Balghakpur, "the city of Rebellion" in Delhi. Bughra, the second son of Sultan Balban, declared independence in Bengal when his son Kaikobad ascended the throne in Delhi. The Moslems had by this time extended their rule into Vanga or Eastern Bengal. Bughra's successors maintained their independence until two of his grandsons quarrelled over the succession, when the elder invoked the aid of Sultan Tughlaq who invaded Bengal and carried off the younger, Bahadur, as a prisoner. Bahadur returned to rule in Eastern Bengal at Sonaragaon. But he again rebelled and was killed. In 1339 Ali Shah, who established himself as ruler of Western Bengal, rebelled, and was not checked by the then Sultan of Delhi, Muhammad ibn Tughlaq. In 1345, he was assassinated at the instigation of his foster-brother, Shams-ud-din Iliyas who annexed Eastern Bengal in 1352 and became Sovereign of all Bengal. In vain did Sultan Firuz of Delhi proceed against Iliyas and his son. Bengal remained independent till 1538 when it was overrun by Emperor Humayun. But Bengal's independence was restored after 3 months by Sher Khan's defeat of Humayun at Chausa, but again destroyed by Sher Shah after his ascent of the imperial throne.

Hindu Chiefs.—Bengal, whether a dependency of Delhi, or an independent Kingdom, was not a homogeneous Moslem State. "Great Hindu landholders held estates which were, in fact, principalities, and their allegiance to a Moslem ruler, like his to a Sultan of Delhi, depended on the ruler's personality. The chief of these States was *Vishnupur*, governed by a Hindu dynasty which was founded in the eighth century and endured until the eighteenth, when it was ruined by the ravages of the Marathas, and by the famine of 1770 which depopulated its territory. Another State was *Dinajpur* which early in the fifteenth century produced a powerful chieftain who dominated the Muslim Sultan and eventually usurped his throne" [*Cambridge Shorter History of India*, pages 270-71].

Land Revenue.—It has been already stated that the indigenous Hindu Land System was practically taken over by Moslem rulers and was "accepted by the people as traditional" [W. H. Moreland in *Cambridge History of India*, IV, 449]. The Hindu System was, as we have seen, marked by numerous

local levies laid on all kinds of economic activity in the village, on production and consumption, on trades and occupations, on various incidents of social life, and most of all on transport. The people submitted to this mass of imposts as something usual and traditional. It was only in the fourteenth century that we find that these were abolished as against Islamic law by Firuz Tughlaq. This abolition was also renewed by Akbar and repeated by Aurangzib, but it did not affect the old system which continued up to the end of the Mughal rule.

State's Share of Produce.—Under this system, cultivation of land carried with it a liability to pay a share of the produce to the State. It was for the State to determine the amount of this share, in accordance with its customary level, and the methods of assessing, and collecting, the amount. Thus the system involved three points, viz., the amount of the share claimed by the State or Landlord, the method of its assessment and the arrangements for realising the revenue fixed.

Under Hindu law, the State claimed usually $1/6$ of the produce and in emergencies $1/4$ and even $1/3$. We read of some Hindu Kingdoms claiming as much as half, but they are too few to justify any generalisation. "In Moslem India it may be said in a general way that the claim usually varied from $1/3$ to $1/2$ " [*Ib.* page 453].

Flogging and enslavement.—Again, under Hindu law, as we have seen, a peasant could be ejected for inefficiency, but Moslem available historical documents do not mention any such provision, but they record cases of "peasants being flogged for failure to produce adequate crops, while sale of a peasant's wife and children, although not of the peasant himself, was a recognised process for the recovery of arrears" [*Ib.* page 452]. Thus, while the indigenous Hindu system secured proper returns from cultivation by the simple provision of ejectment, the Moslem system introduced the innovation of enforcing the standard of cultivation and payment of rent by the cruel methods of corporal punishment and slavery.

Abundance of Land.—Land revenue administration was governed by the central fact of the agriculture of those days that the supply of land was much larger than the demand for it. Therefore, the aim of administration was to keep peasants on land, not to turn them off it. A peasant was not displaced so long as he did his duty. Even where he failed to do it, he could not be displaced without a substitute being found. Where land was waiting for cultivators, an inefficient cultivator would be better than none. Thus occupancy right emerged as a matter of course and became customary.

"The operation of these ideas can be traced in documents issued in the Muslim period by the Revenue Ministry which maintained a permanent departmental tradition of its own" in the midst of violent political changes of the period and the absolutism of the rulers. The policy was rather to attach

cultivators to land lying idle, to offer inducements to them to extend the area of cultivation, or to effect improvements in the class of crops grown (*Ib.* page 453).

Methods of Assessment.—The time-honoured traditional plan has been to make a division of the produce at harvest, or to make an estimate of the produce, and fix the shares on the basis of that estimate. This method may be described as (1) *Sharing* by division, or by estimation, and has the advantage to the cultivator that his liability varies from season to season both with the area sown, and the amount of the produce harvested actually. It was a system based on actuals. (2) The second method was Assessment by *Measurement* by which a fixed charge payable in cash or kind was levied on each unit of area sown. This meant that the cultivator must take the risk of seasons and variations of harvest. In practice, the risk was minimised by the State or the landlord remitting claims against failure of crops. (3) *Contract* as a third method also evolved during this period. Under this method, the cultivator stipulated with the assessor to pay a fixed rent for his holding, irrespective of the returns from cultivation, of the area sown, or the harvest reaped. Such a cultivator was the forerunner of the tenant of the present day. (4) A fourth method was the *Plough-rent*, an old method, by which a stated charge was levied on each plough and team as the unit of productive power. This left the cultivator free with his team to cultivate as he liked in respect of land and crops.

When the demand was thus fixed, it could be paid in cash or kind, as stated before. Collection in kind was the ancient practice. It was replaced by cash payment as the rule in the Moslem period, the produce being valued at current market rates.

Methods of Collection of Revenue.—In the Moslem period, the collection of revenue was not made directly by salaried government officers but by *Intermediaries*. The Moslem rulers found very handy for their purposes four classes of Intermediaries, viz., “(1) Chiefs, (2) Headmen, (3) Farmers and (4) Assignees” [*Ib.* 454].

Collectors of Revenue.—(1) *Chiefs*.—Large areas of the country continued under the ruling Hindu chiefs whose independence was recognised by the Moslem sovereign on condition of contribution of an agreed tribute or military service. Thus the assessment and collection of revenue in these areas continued on traditional lines. A defaulting chief would be visited by a punitive expedition followed by his displacement, or a revision of the terms of his subordination.

The Moslem chronicles tell us of many such ruling Hindu chiefs. Their many descendants are now called Princes in Rajputana and Central India, and “in Bihar and the United Provinces, they usually became landholders” [*Ib.* 455].

(2) *Headmen*.—A village was also assessed as a whole on the basis of its productive capacity, and the assessed revenue was to be paid by the Headman of the village, with the individual holdings of which the State had no direct connection. It was for the Headman to distribute the collective burden of the village among the individual peasants, take the liability for their default, and make his own profit.

(3) *Farmers*.—"The practice of farming the revenue of a village or a larger area is of old standing in India. The farmer engaged to pay a lump sum, hoping to collect more from the peasants. The duration of such farms was ordinarily for one year up to the end of the Moslem period, but in the eighteenth century the duration tended to become indefinite, and in practice the position might even become hereditary" (*Ib.*).

(4) *Assignees*.—"Throughout the Moslem period the great bulk of the cultivated land was ordinarily in the hands of Assignees, but certain tracts described as *Khalisa* were reserved to provide the treasury with cash and were managed directly by Government through its Revenue Ministry" [*Ib.* 456]. Assignees were created out of the high officers of the State who were paid salaries, out of which they had to provide a prescribed force of cavalry for the sovereign's needs. Such salaries were not, however, as a rule paid in cash but charged upon the revenue of an area assigned to the Jagirdar. The Assignee or Jagirdar thus was left free to administer the area, and assess and collect the revenue of the peasant, like a State within a State, by his own agents or servants, or through the village Headman, or through farmers.

The structure of the Land Revenue Administration as described above is not, however, to be understood as a rigid structure. Changes were always going on within it. A paid collector of revenue might find it profitable to transform himself into a farmer and relieve himself of the liability to render accounts by undertaking to pay a stated amount. Similarly, a farmer might in time raise himself to the position of a tribute-paying chief, and a village headman might similarly improve his position as a village chief "taking farms of neighbouring villages" [*Ib.*].

System under Sher Shah (1540-45).—Sher Shah acquired first hand experience of the then land system of his country by administering the estate of his father as a jagirdar of the Lodi dynasty. To Sher Shah belongs the credit of first introducing measurement in place of the previous system of sharing the crop [*Ain*, I. 297; *Akbar Nama*, II. 117, 282, 381, 404, 457]. We are also told that in his time the State's share of the produce was $\frac{1}{3}$ and the cultivator's $\frac{2}{3}$ [*Abbas*, 145].

The unit of measurement was the *Gaz* of Sikandar Lodi=32 digits long. 60 yards made a *Jarib* and 3,600 square yards a *bigha*. Land was measured by rope.

Sher Shah's reform consisted in the method of assessment. Standard yields of each staple crop were calculated or estimated separately for three classes of land, "good", "middling" and "inferior". Then the average

of these figures was struck and one-third of the average was claimed as revenue from each unit of area. The average was, however, an abstraction and had no relation to the actual yield. The system unfortunately meant overcharging the worst land and undercharging the best. In the case of wheat, for instance, while the better land paid 24 per cent, the charge on "inferior" land worked out at 48 per cent. The inequality was, however, remedied by variations in the crops grown.

It cannot be known definitely from the available sources whether these standard yields were calculated separately for each agricultural region or whether common standards were applied all over the kingdom as a whole. As Sher Shah's rule was very short, his system of measurement could not have been applied all over the Suri dominions. We are told, for instance, that the system of sharing the produce obtained in Rajputana, and that in Multan land was not measured, while revenue was fixed at $1/4$ of the produce. Certain parts even of Bengal also could not have been measured, since they remained unmeasured in Akbar's time [*Abbas*, 129-30]. It thus stands to reason that Sher Shah lived to apply his system of measurement only in the Crown lands.

His system did not operate in the jagirs. Sher Shah, with all his predilections in favour of a direct contact with the cultivator, had to continue the Assignments as before, with all the administrative freedom usually allowed to them. He had to give away in jagirs large parts of his dominion to officials. Khwas Khan alone is stated to have held a tenth of the whole land. Extensive jagirs were held by Haji Khan, Shujat Khan, and other great military commanders [*Abbas*, 131, 142, 147, 148]. Even Hakims in charge of different garrisons were paid by grants of land as jagir within their own commands. The land revenue in these jagirs was settled according to the usual practice of sharing of the produce.

There are a few details recorded regarding Sher Shah's reforms in the system of collection. The cultivator was given a demand slip stating the amount of Government's claim. He had to pay additional cesses, fee for measurement a percentage to the collector, besides expense of feeding the land revenue officers on tour. The village Headman was also employed to collect revenue, provided he executed a bond, and furnished securities. The cultivator was granted a receipt. The method of realising revenue was ruthless as before. The defaulting cultivator was imprisoned and tortured till he paid his dues [*Abbas*, 17, 147].

The cultivator had full proprietary rights subject to payment of land revenue. He could inherit, bequeath, sell, or mortgage his land.

System under Akbar.—The historical importance of Sher Shah's scheme of Land Revenue Administration lies in the fact that it was adopted by the great Akbar as the basis of his own scheme which was gradually evolved through a series of experiments. Akbar's experiments in assessment first concerned the heart of the empire from the Punjab to Bihar. Next, he had to deal with the Assignments or Jagirs. Lastly emerged the scheme which was finally adopted for the empire as a whole.

Its Description.—The Land Revenue Administration was a part of the general administration, of which the machinery in outline may be first described. Administration always means a division of the country into areas in an ascending scale from the lowest in the village up to the top at headquarters. In Mughal administration, the following were its divisions :—

(1) *Pargana* which was a fixed historical division as distinguished from the *Mahal* which was a fiscal unit and hence was liable to change ; (2) *Sarkar*, the next larger administrative unit. It was administered by two officers, viz. (a) the *Amalguzar* who was in charge of accounts, assessment, and collection of revenue and (b) *Faujdar* who was charged with military functions. (3) *Suba* was the next higher administrative division corresponding to a modern Province. The provincial head or governor was called the *Sipah-salar*. He had under him the various departmental officers such as the revenue officers called (a) the *Khazanadar* or *Fauzadar* (Potdar) in charge of the treasury and account duties and (b) *Bitikchi*, the accountant, who was the chief assistant at the treasury. All the threads of the administration met in the *Sipah-Salar*.

To illustrate this administrative arrangement : *Suba* Ajmer was made up of 7 *Sarkars* and 97 *Parganas*.

The chronicles of the period reveal the working of three principal revenue systems which may be thus described :—

(1) *Ghallabaksh*, a system of Crop Division, under which a share of each crop is taken by the State. The share was generally determined by estimation and not by actual weighing. The value of the estimated share was then commuted for cash. This system was in force in Tatta (Lower Sind), part of *Suba* of Kabul, *Sarkar* of Kashmir, and so forth.

(2) *Zabti* or Regulation system which was meant to remedy the defects of Crop-Division, viz., dependence of revenue on the area sown and on the yield per unit of the area, and to eliminate the uncertainties due to variation in the yield. Thus the idea was to charge each plot of land sown with a fixed assessment, and that in cash, determined according to the kind of crop grown. The revenue officers' duty in operating this system was to furnish each season a statement showing the area under each crop, and, by applying the prescribed rates, to ascertain the revenue demand before harvest. Thus the system rested on two factors : (A) *Schedule* of Rates called *Dastur*. *Dasturs* are not given for all the *Subas* in Akbar's government nor sometimes for the complete *Suba*. They are given for the whole country from Multan and Lahore to Bihar, Malwa, and Ajmer, but not for Bengal, Berar, Khandesh, Tatta (acquired later) or Kumaun.

The *Crop-Rates* were fixed by (i) roughly taking the average produce of good, middling, and bad land under each grade of land, *polaj* (land continuously cultivated) or *paranti* (land left fallow for a year or two). Of the average thus determined, the State revenue demand was as high as 1/3. From the *Crop-Rates* were deduced the *Produce-Rates*. The method of assessment may be thus illustrated : *Wheat*, per bigha, on "good" land, amounts to 18 maunds ;

“ middling ”, 12 maunds ; “ bad ”, 8 maunds 35 seers ; total, 38 maunds 35 seers. $\frac{1}{3}$ of this, 12 maunds $38\frac{1}{3}$ seers are taken as *mahsul* (average produce) and $\frac{1}{3}$ of the *mahsul*, 4 maunds $12\frac{2}{3}$ seers, the demand.

(ii) By getting *Cash-Rates* from *Produce-Rates* on the basis of yield and prices. At first this was done at headquarters annually, so that collections had to wait for it. Later, Akbar ordered the ten-year Assessment arrived at by averaging the assessments for the 10 years, 1571-80 A. D. *Cash-Rates* were then fixed on the average of 10 years' actuals. According to Vincent Smith, these were selected rates based on the average of the most fertile fields. But the words used on the point in the original text of *Ain* translated as “ best crops ” might signify not the “ highest yields ” but the superior grades of crops like Sugar-cane as against coarse millets and pulses.

The *Cash-Rates* of course applied to *polaj*, i.e., land under continuous cultivation. On land occasionally left fallow (*paranti*), full rates were charged when it was cultivated but nothing otherwise. Reduced revenue was charged to hasten recovery of land out of cultivation for 3 or 4 years (*chachar*) or land uncultivated for 5 years or more (*banjar*).

(B) *Preparation of Crop-Statements* :—Like the revenue rates, the areas to which they had to be applied had also to be determined by Survey or Measurement (*paimash*) by (i) fixing the standard *bigha* and (ii) substituting a measuring rod for rope previously used. The Survey Staff were paid by piece-work and not task-work, 1 *dam* per *bigha*, and were also given diet-allowance, but had to give security. The headman and accountant of each village had to keep duplicate records to be passed by the revenue officer, *Amalguzar*. When the record for a village was completed, it was entered in the *Muntakhab* (Abstract) which was forwarded weekly to imperial headquarters. Calamities occurring after despatch of the estimate were to be reported for sanction for the alterations called for. It further appears that the *Bitikchi* was to record the name of the cultivator and of his headman and, below it, the kind of crop grown and to separate the *nabud* (unproductive area) from the *bud* (cropped area) of the holding.

Thus the assessment under this system was *Ryotwari*, the demand being fixed on each cultivator.

The system thus worked in practice : “ Each season, a staff set to work to make the Crop-Statement, working over the cultivated area of the village, writing up the areas of the various plots from the previous records, and measuring the plots for which areas were not on record. The record thus showed the area of each crop contained in each holding, and the *Bitikchi* applied the prescribed rates to these areas and thus deduced the revenue due for that season from each cultivator and from the whole village. ”

It is doubtful whether the *Zabti* procedure was of the nature of an assessment so that the demand under it was meant to be collected or whether it was of the nature of a budget estimate.

(3) *Nasag* :—Under this, revenue was fixed by arrangement or contract and not based on a detailed examination of the yield of crops, thus resembling the zemindari rather than a ryotwari settlement. This system was in force in Bengal, Berar, Kashmir, and parts of Gujarat.

Contemporary records refer to *Nasagi* as a system in which measurement was not necessary [*Ain* I, 285], which was applied in crown lands [*Akbār Nama* II, 333], did not require survey or Dasturs (Schedules of revenue demand in cash levied upon one bigha under different crops), did not deal with the village headman but with individual cultivators [*Ain*, I, 286], allowed of decrease of demand due to damage to crops [*Ib.*] and could operate simultaneously with *Zabti* even in the same village [*Ib.* 287]. A MS. of *Dastur-ul-Amal* of Todar Mall in the Rampur State Library further defines *Nasagi* as a method of assessment by which $1/12$ of the revenue demand of the last 12 years was permanently fixed as the land revenue payable by the land in question [Professor Sri Ram Sharma in *Indian Culture*, III, 545]. This system, accordingly, did not depend upon Survey, Seasonal Records of Produce, area of cultivation, or the crops grown. It fixed the demand irrespective of these factors.

Besides these three, there were other revenue systems based on summary settlement and operating in areas which did not yet fully recognize the revenue claims of Akbar's empire and were but outliers with reference to the centres or settled parts of his administration: for example, Mungir, which was a disturbed area, until Bengal was finally subjugated. Some *Mahals* again were held on agreements settled in cash under the *Zemindari* system of assessment, on fixed payments, instead of contributing varying amounts made up of the sums assessed seasonally on individual cultivators.

It is to be noted that the revenue system was not necessarily uniform throughout even a *Suba* or a *Sarkar*. E.g., if Lahore was a *Zabti* Suba, the *Zabti* might not be carried out in every Mahal thereof.

In general, it may be observed that the *Zabti* or Regulation system applied to the heart of the empire from Sind to Bihar, and also southwards in Malwa, Ajmer, and Gujrat; the earlier systems were in force in newly acquired parts, in Bengal, Berar, Khandesh, Tatta, and parts of Kabul; while more summary methods were adopted for smaller areas presenting conditions not permitting application of the Regulation system.

The Mughal assessment amounting to a third of the produce was felt to be very severe. In 1586, a million rupees had to be remitted from the revenues of crown-lands in the *Subas* of Delhi, Oudh, and Allahabad because prices were too low for peasants to pay full cash-rates.

Its Evolution.—We may now have a general view of the various stages and experiments by which the Mughal land revenue system was being shaped into its final forms which later influenced the British system.

As we have seen, the earliest was the *Sharing* system based on the actuals of produce. Sher Shah first introduced the innovation of *Measurement* as the basis of assessment. This method worked out the normal produce of each crop per bigha of average land, as already explained. The State revenue demand amounted to 1/3 of this average produce, and was paid in kind by the cultivator. A schedule of Rates of assessment per *bigha* of different crops was in the hands of government. This method was suggested by the need of the State to know its resources of land-revenue upon which it could depend. The assessment based on actuals did not serve this purpose, as it was liable to fluctuations due to prices, seasons, and other factors.

Sher Shah did not live long enough to see the results of this reform. He mainly depended upon the older method of *Sharing*.

Akbar's idea was to translate the grain rates contemplated by Sher Shah into cash-rates. Just as Sher Shah based his assessment upon the average yield per bigha of a crop, Akbar worked out the average price of this yield in order to convert grain demands into cash-demands. For the first four years, a uniform set of prices was adopted for this purpose. That is why the State demand in cash per bigha of different crops was practically the same all over the empire [*Ain*, I, 303-341]. The standard of prices thus applied represented the average of the prices prevailing in different localities. Akbar's Revenue officials applied the process of averaging in arriving at the total produce of one bigha of land under different crops. These average prices were ascertained with reference to areas near the cities or the normal markets and must have been prepared every year in the Imperial Secretariat to be sent on to the local revenue authorities [*Ib.* I, 347].

In the tenth year of Akbar's rule, we notice a change. The cash demand per bigha for various crops is now seen to be different from Province to Province. The Province was now adopted as the unit for fixing the standard prices. Local prices were now recognized as a more just basis of assessment as corresponding more to actuals than the centralised schedule of prices for a vast empire, which was liable to be more oppressive as a mere abstraction. Even within the Province we notice that the rates are not adopted as same for certain commodities.

In the 13th year, Dewan Shihabuddin gave up the annual *Zabti* and first introduced *Nasag* for crown-lands, a sort of permanent settlement of the States' revenue with no reference to actual yields.

The next stage was the *Zabti* system. The need was felt for a satisfactory method by which the demand in kind could be converted into cash, as was wanted by the emperor. For this again, the process of averaging was restored to. "From the beginning of the 15th year to the 24th of the Divine era, an aggregate of the rates of collection was formed and a tenth of the same was fixed as the annual assessment" [*Ib.* 347, 348]. This meant, as has been already pointed out, the division of a Province into *Dasturs* or assessment circles comprising areas where the same rates of demand prevailed. These

Dasturs would correspond to what we call "*Markets*". In the Schedule of Rates given under the heading *Ain-i-Deh Sāla*, Provinces are shown as comprising both *Sarkars* and *Dasturs*, e.g., Allahabad counting 9 *Sarkars* and 15 *Dasturs* or fiscal divisions, assessment districts, based on agricultural homogeneity. For each of these assessment districts, the last ten years' average price was adopted as the basis for calculating the money value of the demand in kind for individual crops. To work this system, records were kept of areas distributed under different crops in a particular field or holding. For every *Dastur*, Tables were prepared showing the cash demand of the State per bigha of every crop. For instance, to assess a cultivator of Firuzabad in Oudh, who had 4 bighas under sugar-cane, the revenue official would consult his Schedule of Rates, find sugar-cane assessed at *dam* 240 *jatal* 9 per bigha and demand *dam* 961 and *jatal* 11 from the cultivator. The Schedule of Rates shows their extensive range. To take a sample, one Schedule mentions small millets being charged 11 *dam* (1 *dam* = 1/40 of a rupee), large millets from 25 to 30, barley 40, wheat 60, sugar-cane and indigo 120, and betel 220. These rates explain why the revenue ministry was constantly calling for improvement in the grade of crops grown. A change from cereals to sugar-cane would mean trebling the revenue.

These fiscal measures which were adopted in the 24th year were revised and given a final form by Todar Mal [*Akbar Nama*, III, 381].

Fiscal constituents of the Mughal Empire.—Akbar's dominion, from the fiscal or revenue point of view, was made up of three classes of areas: (1) Crown-Lands or Khas Mahal, (2) Territory under Zemindars or Ruling Chiefs and (3) Area held by the Assignees or Jagirdars. The *Zemindars* were those who did not accept service or status as Mansabdars under the Imperial Government but retained their position as rulers of their own domains, subject to payment of a tribute to the emperor. They collected the land revenue from their cultivators in their traditional indigenous methods. The same remarks apply to the Rajput Jagirdars and other ruling chiefs although they accepted the Mansabdari. They received back their estates as perpetual Jagirs where they operated the indigenous systems of collection of land-revenue.

Composition of Bengal.—All the lands described in the *Ain* as forming part of Bengal and Orissa were not conquered by Akbar at the time of the *Ain*. Even of the conquered portion, the larger part was held by chiefs, of whom the following chiefs, among others, are mentioned in two contemporary *Memoirs* of Jahangir's reign: Usman, Afgan leader; Raja Satarjit of Bhusna; Raja Indar Narain of Pachet; Salim Khan of Hijilli; Raja Bir Hamir of Mandarahn; the Bhumiya Zemindars of Bhowal, Vikrampur, Bhalava, Chandra Dip, and Khizrpur; Raja Raghu Nath of Shushing; Majlis Oub of Fathabad; Musa Khan of Jatrapur; Pahalwan of Matang; Ram Chandra of Bagula; Bayazid of Sylhet; and several others.

Agricultural Policy.—The Mughal agricultural policy was determined by the needs of revenue. As has been already indicated, increase of revenue could be effected in two ways, horizontal and vertical, by extension of cultivation, and by improvement in the class of crops. For effecting these changes, the Collector was invested with wide powers; to induce production of more paying crops by reducing the standard rates; make temporary reductions in the Schedule of Rates so as to stimulate cultivation of lands thrown out of cultivation; promote reclamation of waste lands on cultivator's terms; and where co-operation of the village headman was necessary, to secure it by rewards (*Ain*, I, 285]. Akbar also provided for loans repayable within a year to the agriculturists [*Akbar nama*, III, 381]. Some details of the working out of this Agricultural policy are also given. A project of reclamation assumed its completion within 5 years, after which the full normal demand would be paid, with 1/26 of produce payable in the first year. To bring land into cultivation after less than 5 years, the demand would be fixed initially at 2/15 to come up to the normal rate of 1/3 in the fifth year. A reduction of 25 per cent. of the Schedule of Rates was offered as an inducement to the cultivation of improved varieties of crops [*Ain* I, 284].

Revenue History under Akbar's Successors : Jahangir.—It is apparent from the records that the part of Akbar's revenue system which aimed at Ryotwari Settlements did not at all prosper after him. Under Jahangir, "Akbar's Regulation System was discarded and replaced by Village Assessments made with the headman or with farmers, as circumstances might permit". Even under Akbar, *Zabti* had a very limited operation, as we have seen, in the Provinces of Multan, Lahore, Delhi, Agra, Allahabad, and the bulk of Bihar. The outlying Provinces and the large territories held by the chiefs did not come under the imperial revenue system. The system of assignments was also being radically changed under constant complaints, due to its unstable character. Temporary and changeable assignments did not make for any sustained constructive policy of agricultural development. William Hawkins, the first English Assignee, has described the corruption practised by the Revenue Ministry in distributing the assignments on the basis of bids and bribery so as to render the system highly unpopular, with a consequent fall in agricultural production. The remedy was applied in allowing Assignees more freedom in the management of their holdings in the possession of which they were not disturbed so long as there were no complaints to reach the emperor. Another reform along these lines was the introduction by Jahangir of the Central Asian system of tenure known as the *Altamghā* grant conferring upon a deserving officer the tenure of the village or pargana in which he was born, with the provision that the grant once made would not be altered or resumed. These *Altamghā* grants represent the nearest approach to the land ownership of Mughal times. They became very popular in the 18th century and were later recognised by the British Government as conveying a permanent and transferable right to hold land free of revenue in a complete form of land ownership now extant.

Shah Jahan.—The documents of the early years of Aurangzib show that in Shah Jahan's time, "the general rule was to assess the village through the head man at a sum calculated to yield the equivalent of from $1/3$ to $1/2$ of the produce, and that this rule applied, at least formally, to assigned as well as reserved areas." Assignment also continued to be the prevalent practice.

Aurangzib.—It is interesting to note that Murshid Quli Khan first emerges in history as the Diwan of Daulatabad and Telingana under Prince Aurangzib's second Viceroyalty of the Deccan where after the terrible famine of 1630-32, a complete reorganisation of the revenue system was called for. Murshid Quli Khan was quite equal to the task. He tried the traditional *plough-rents* in the undeveloped agricultural areas, fixing a permanent charge upon each plough and team and leaving the peasant free to extend or improve his cultivation. In other areas, he applied *Sharing* and *Measurement*. The share claimed by the State was not uniform. It varied with the crop and irrigation facility. Land irrigated by rain paid $1/2$, from wells $1/3$, and $1/4$ — $1/9$ where it grew valuable crops like sugarcane or poppy. Under *Measurement*, however, the assessment rates, which were fixed in cash, were based on a uniform claim to $1/4$ of the produce, a very low assessment for those days, which was offered to speed up reclamation.

Assessment increased to half.—Murshid Quli Khan's successful measures hardly influenced affairs in the north where assessment was tending to be higher and more severe. Akbar's maximum of $1/3$ was now the minimum rising up to a maximum of $1/2$ of produce as the State demand. The maximum became now the rule in northern India. Secondly, the direct dealing with the cultivator, in which Akbar believed, was given up and Settlement was made with the village headman. Thirdly, the demand on the headman was enhanced as far as possible and its brunt had to be borne by the tillers of the soil. The age of Akbar and Todar Mal was now sighed for as the golden age by the overassessed peasantry. Village assessment became now the order of the day under Aurangzib, though it was in vogue in pre-Muslim times when it was easier to deal with villages as units than a direct approach and assessment of individual cultivators.

The agricultural situation thus produced in Aurangzib's regime was marked by a scarcity of peasants and their tendency to abscond. Bernier also from his experience of 8 years' stay at the Mughal court describes how agriculture was declining under the "execrable tyranny" practised upon the poor peasant by all the higher revenue agents, officials, farmers, and assignees. Most of these were drifting to the towns to work as menials or resorting to service in the army.

Bernier is confirmed by the poet Mukunda Ram Kavikankan who, in his *Chandi-mangala*, describes how helpless tenants suffered from the tyranny of the revenue officers who "counted 15 *cottahs* as 20" [কোণে কোণে দিয়া দড়া গনর কাঠায় কুড়া], "uncultivated as cultivated lands to pay revenue" [খিল ভূমি লেখে লাল], "did not pay labourers their daily wage with which to buy seeds

and bullocks for cultivation," so that the tenantry in despair "deserted their homesteads by selling all they had, even their spades." This was even in the time of Man Singh [রাজা মানসিংহের কালে] and Akbar.

The system of annual village assessments continued up to the end of the Moslem period and the beginnings of British rule.

Assignment now became a losing concern with decline of agriculture which was further depressed by the Maratha levy of *Chauth* accepted by the emperor.

Farming now became more popular. In Bengal, its conditions were singular. It was based on a permanent settlement of the demand. So long as the revenue thus settled was paid, the Collector-Farmers continued indefinitely in their Circles and were free to bequeath them to their heirs. Thus they came to resemble more and more the ruling chiefs and the two classes were eventually designated as *Zemindars*, or "landholders". In fact, the agricultural conditions of the country in these days of the decline and fall of the Mughal Empire were working radical changes among all intermediaries and effecting a gradual "transformation of a heterogeneous body of chiefs farmers, and grantees into a class which under British rule was to become a homogeneous body of landlords" [Cambridge History of India, IV, Ch. 16].

The system of the permanent settlement of revenue that grew up in Bengal was, however, subject to the imposition of cesses and additional demands which were justified only on the ground that the landholders should not exclusively exploit the economic recovery of the country following in the wake of the Dutch and British trade springing up after the middle of the 17th century.

The beginning of British rule in Bengal thus saw "the bulk of the country being held by a relatively small number of landholders, who enjoyed practical freedom in their relation with the peasants and paid to the State dues which were in fact adjustable at its discretion but by methods which are not known to have been practised elsewhere in Mughal India" [*Ib.*].

Summary and Conclusions.—We may now sum up the conclusions pointed to by the foregoing account of the pre-British land systems.

In the Hindu system, the State usually claimed as revenue 1/6 of the produce. The share was not determined by measurement but by estimate. The revenue was also paid in kind. It was only the Sena kings of Bengal who introduced cash-payment. Besides Revenue, Agriculture had to pay various other imposts. There was a comprehensive system of rural taxation. All income earned in the village in any way, by agriculture, handicrafts, trade, or transport, was taxed. The standard and efficiency of cultivation were secured by the legal remedy provided in eviction or ejectment. Different crops paid revenue at different rates. Water-rates were charged and varied with the means employed for the supply of water and their costs. Grants of land were made to officers of Government in lieu of cash-salaries to impart

impetus to agricultural development under competent direction, so that it might not be left entirely to an ignorant and resourceless peasantry. The system was observed to be in operation even by the Chinese traveller, Yüan Chwang, in India under Harsha in the seventh century A.D. It was very suitable in ancient times in creating a class of educated agriculturists. Grants of land were also made liberally to endow learning and religion. The University of Nalanda, for instance, in its palmy days, when it attracted students from far-off countries like Korea and counted on its rolls 10,000 students in residence, depended upon its property of 200 villages, which were the gifts of kings and philanthropists, to give free food, lodging, bedding, tuition, and medicine to all its alumni. The Buddhist Monasteries through the ages had been maintained by the public by these grants of land and gifts in kind. A good deal of the agriculture of the country thus passed under the control of the advanced classes of the community. The accounts given in the texts and records of these Buddhist Universities and Brahminical Colleges show that they had to maintain a sort of agricultural department to arrange for the proper utilisation of the lands and villages granted to them as the sources of their upkeep. These lands, as stated in the Buddhist texts, were in charge of Superintendents called *Ārāṃikas* who arranged for their cultivation chiefly by employing professional peasants on the basis of half the share of produce, like the Bargadars of the present day. Thus Agriculture became the concern of the Colleges and Universities of ancient India. It was equally and more vitally the concern of the Government officers to whom the lands granted to them in lieu of salaries were the means of their very livelihood.

Moslem rule could not penetrate at once into the interior of the country. It did not affect the conditions of the countryside. Villages continued as before as seats of self-government and indigenous culture. The new rulers had to depend upon the Hindu institutions, agencies, and machinery for general administration and collection of land revenue. Hindu rulers and landholders were confirmed in the possession of their hereditary lands on offer of allegiance as vassals. This concession to Hinduism was one of the pretexts for Timur's invasion. "All posts connected with the assessment and collection of land-revenue were held by Hindus." Even a Turkish tyrant like Balban was given receptions in his triumphal progresses through the country by the higher Hindu officers and landholders, then known as *Maquaddams*, *Rais*, and *Chaudhuris*. The Moslem element was represented by the military fiefs which were like islands of foreign rule in an ocean of millions of Hindu agriculturists.

The principle of assessment remained the same. It was sharing of the produce. The share in the Hindu system varied between $1/6$ and $1/4$ of the produce, $1/4$ being exceptional. In Moslem India, the usual rate was raised and varied from $1/3$ to $1/2$. In Aurangzib's time, $1/2$ became the standard. There was also reform in other directions. Hitherto sharing was by estimate. The estimate varied with seasons and crops, and the land-revenue due to the

state varied with it. This led Sher Shah to render the demand free from fluctuations by basing it on *Measurement*, i.e., on the average of the yield of 1 bigha of land under different crops, the land taken being also the average of good, middling, and inferior lands of the locality. The demand, however, continued to be paid in kind, as through the ages. The fixity of the demand thus introduced by Sher Shah first introduced the principle of *Permanent Settlement*.

Akbar's reform was to convert crop-rates and produce-rates upon which Sher Shāh had based his system into cash-rates and replace payment in kind by payment in cash. How it was sought to be done has been already explained.

These land-revenue reforms, however, operated in limited areas, in the crown land. But the bulk of the country was in the hands of indigenous intermediaries, Ruling Chiefs like Vishnupur or Dinajpur, Farmers, Assignees, Jagirdars, and village headmen. Bengal especially was the land of its indigenous chiefs.

Akbar's Zabti or Regulation system was a system of State-landlordism aiming at direct settlement with the individual cultivator. But it had a most limited operation, as shown before, while Akbar's successors preferred to depend upon the intermediaries and did not approve of the Ryotwari system. The village headman became more important than the individual cultivator. There was also going on an important change in another direction. Annual or temporary settlements made them unpopular and the system of intermediaries almost broke down at the time of Aurangzib till it was revived and strengthened by Permanent Settlement. On the basis of this principle of Permanent Settlement, the different classes of intermediaries, chiefs, farmers, Jagirdars or Assignees were also being grouped into one class designated by the common name of zamindars. Thus long before British rule, the principle of Permanent Settlement was an established principle and the growth of the landholders as a homogeneous body out of the heterogeneous body of different classes of intermediaries became an accomplished fact.



PART III

MODERN

(up to 1793 with reference to Bengal)

Political History : Bengal Under Independent Moslem Rulers.—As we have already seen, Bengal passed under Muslim Rule with the conquest of Sultan Kutb-ud-din in A. D. 1210, but the rule of the Delhi Sultanate in Bengal was not too stable. The Sultan's Governors in Bengal were not conspicuous for their loyalty. In A.D. 1338, Fakhr-ud-din, the Governor, practically declared his independence, and since his time, 21 independent Kings of Bengal, with some interruptions, intervened, until the year 1576, when it was left to Akbar to achieve the complete conquest of Bengal after its last King, Daud Khan, was killed.

Bengal as a Province of the Moghul Empire.—From 1576 up to 1707, when Aurangzeb died, Bengal developed as a Province of the Moghul Empire under the control of Governors. First, internal revolts had to be quelled by the Governors in Bihar and Orissa up to the year 1605. Raja Todar Mall was the Governor from 1580 to 1582 and Man Singh from 1587 to 1604. The period from 1605 to 1707 marks the period of consolidation under the rule of 19 Governors, among whom three were the sons of reigning Emperors such as Shah Jahan (1622-1625), Sultan Muhammad Shuja (1639-1660) and Sultan Muhammad Azam (1678-1680), and four others were related to the Imperial House of whom the most famous was Shayesta Khan (1664-1677 and 1680-1689). Other notable Governors were Islam Khan (1608-1313) and Mir Jumla (1660-1664). Some of these Governors were not loyal to Delhi. Shah Jahan himself in 1682 rebelled against his father Jahangir, and conquered Orissa, Bengal and Bihar for himself. In 1657, Shuja rebelled, and became a menace to Delhi.

Up to 1607, Bengal, Bihar and Orissa were administered as a single Governorship. In 1607, Jahangir Kuli Khan became Governor of Bengal and Orissa, Bihar was created a separate Governorship under Islam Khan, and this arrangement continued until 1697. In 1608, Islam Khan became Governor of Bengal, but transferred the Capital from Rajmahal to Dacca to be nearer to Arakan and its pirates. In 1697, however, the three Provinces were again re-united under the Governorship of Azim-ush-Shan, the Emperor's grandson ; but under Emperor's order, he transferred the Capital in 1703 to Rajmahal, and thence to Patna. In 1706, he was recalled to Delhi, and his son, Farrukh Siyar, who was acting as his Deputy at Dacca since 1703, now acted as Governor of Bengal and Orissa, while there was a Deputy Governor for Bihar.

Nazim.—At this time, there was a change in the title of Governor too. Hitherto it was *Sipahsalar* (Commander-in-Chief) and, later, *Subadar* (ruler of the Suba or Province) and now *Nawab-i-Nazim*.

Up to 1697, there were two Nawabs or Nazims, one for Bengal and Orissa, and one for Bihar. Only Shah Jahan (1622-1625) acted as the only Nazim, and appointed two *Naib-Nazims* for Bengal and Bihar.

Dewan.—An important administrative development was the emergence of the *Dewan*. The Office was first created by Akbar in 1569. It was to relieve the *Nazim* of part of his duties. The *Dewan* was subordinate to the *Nazim*. The arrangement worked well for about a hundred years. But, later, under Aurangzeb, with his increasing demand of revenue to pay for his wars, the position of the *Dewan* grew in importance. The *Dewan* also had an added importance as the authority to grant trade licences to a body like the East India Company. The power of the *Dewan* was at its highest, when Murshid Quli Khan became the *Dewan* of Bengal, Bihar and Orissa in 1701. At that time, while the *Nazim* appointed a *Naib-Nazim* to carry on the administration of Bengal from Dacca, the *Dewan* administered from his headquarters at Murshidabad the finances of three Provinces, without a Deputy. To add to this, in 1704, Murshid Quli Khan was himself appointed as *Naib-Nazim* of Bengal and Orissa, while retaining the post of the *Dewan* of three Provinces.

Supremacy of Murshid Quli Khan.—Murshid Quli Khan was responsible for further administrative innovations. He began to appoint *Naib-Dewans* for Bengal and Orissa. Syed Reza Khan and Sarfaraz Khan became *Naib-Dewans* of Bengal. The climax was reached in 1713, when, on the accession of Farrukh Siyar as Emperor, Murshid Quli Khan secured for himself the double post of *Nazim* and *Dewan* of the three Provinces. This made him so powerful that in 1717, he defied the order of the Emperor by not giving effect to the application granted by him to the British to purchase Zemindary rights in thirty-eight villages near Calcutta, as will be stated below.

Later Nawabs.—After Murshid Quli Khan's death in 1725 the succession lists of *Nazims* and *Dewans* were as follows.—

- (1) Shuja-uddin Khan, *Nazim* (1725-1739), son-in-law of Murshid Quli Khan.

He appointed as his *Dewan* his son Sarfaraz Khan. There was a *Naib-Nazim* at Dacca and also a *Naib-Dewan*. Jasawanta Rai was *Naib-Nazim* of Dacca.

- (2) Sarfaraz Khan, *Nazim* (1739-1740). The office of *Dewan* was held by a Council consisting of Hazi Ahmad and Jagat Seth.

- (3) Ali Verdi Khan, *Nazim* (1740-1756). His *Dewan* acted as the *Naib-Nazim* at Dacca, with a Deputy to rule in Dacca. In 1754, Raja Raj Ballabh became his Deputy at Dacca.

- (4) Siraj-ud-daula, *Nazim* (1756-1757), grandson of Aliverdi Khan. He appointed Mohan Lal as his *Dewan* and Jasrat Khan the *Naib-Nazim* of Dacca (1756—1781).
- (5) Mir Jafar, *Nazim* (1757-1760).
- (6) Kasim Ali Khan, *Nazim* (1760-1763).
- (7) Mir Jafar, *Nazim* (1763-1765).
- (8) Najim-ud-daula, *Nazim*, son of Mir Jafar (1765-1766), with his Deputy Muhammad Reza Khan.
- (9) Saif-ul-Daulah (1766-1770).

Rise of the British Power.—The decline and fall of the Moghul Empire was however changing Bengal's history and introduced to it a new factor in the rise of the British power. British power established its foothold in India by establishing trading factories. In 1632, the English first came to Cuttack and, in 1633, established two factories, one at Harishpur and the other at Balasore. By the year 1676, thanks to the licences granted by the Bengal Governors, Shuja and Shayesta Khan, the Company established three main factories at Hugly, Kasimbazar and Balasore, together with subsidiary factories at Patna and Dacca. A further development of the British power took place in 1681 when the East India Company, out of regard for its naval strength and resources, and the importance of the Bay of Bengal, created "the Bay" into a separate trade Division. It was administratively independent of Madras and was placed under the charge of a separate Governor, William Hedges. An important event happened in 1696 when the Company was given permission to build a Fort at Calcutta. Earlier in 1686, Job Charnock for the first time gave a new turn to the Company's activities by his capture of Chittagong and holding that place as a military conquest. In the year 1696, Subha Singh, a Zamindar in the vicinity of Burdwan, revolted and called to his aid Rahim Khan, the Afghan Chief of Orissa. This insurrection spread into the whole of Western Bengal, and the territory from Rajmahal to Midnapore came for the time being into the hands of the Afghans. It was this disturbance that compelled the Governor of Bengal, Nawab Ibrahim Khan, to give permission in general terms to the English, the Dutch, and the French, to fortify their respective factories. The consequence of this permission was the commencement of Fort William in Calcutta. It was not, however, the building of this fortress but the acquisition in 1698 by the Company of the tenure on terms of Moghul Revenue Law of the three villages of Calcutta, Sutanati and Govindpur that really laid the foundation of British rule in Bengal. "By the acquisition of these three villages the East India Company obtained for the first time a legal position within the Moghul Empire and thus brought into existence a working theory in the development of which the acceptance of the *Dewani* is the final logical completion" [FIRMINGER'S "HISTORICAL INTRODUCTION TO THE FIFTH REPORT" (page lxy)].

The Company as Zemindar: Beginnings of Calcutta.—That the Permanent Settlement and the Zemindary system were already established as integral parts of the Mogul Revenue system is very well illustrated by the terms and circumstances under which the East India Company first acquired its position as a Zemindar. It was on August 24, 1690, that Charnock made his famous "Mid Day Halt" at Sutanati after sailing up the river, starting from Madras. That day stands out in history as the foundation day of the premier city of British India. Sutanati, however, began rapidly to grow up with an increase of population giving rise to problems of administration, calling for control of roads, markets, river landing places and the like. This led the Company to seek some jurisdiction and recognised authority such as that possessed by the Zemindars of those days. On 14th December 1697, the Council at Calcutta wrote home to say that the Company "for a firm settlement in this place" wanted "the farming of the towns adjacent," which would give them "a right to the place." First, they applied for it to "the Jimidar of the Country," offering him " $\frac{1}{4}$ part more than he was getting from the place," but the Zemindar won't agree, because "they were a powerful people" whom he could not remove afterwards, "as he could the natives." The Company now applied directly to the Nawab Azim-Ush-Shan for the grant to them of Zemindary rights in three towns adjacent to their settlement, viz., Dehi-Calcutta, Sutanati, and Govindpur in Pargana Paikan. These towns belonged to the Mogul Khalsa or territory directly assumed by the Imperial Exchequer and had been granted by the Emperor to the Subadar of Bengal as part of his Jaagir. The Subadar or the Governor of Bengal was therefore fully entitled to make this transaction relating to his *khass* land. By this transaction the English were granted "the Jimmidarship of the said towns" and made responsible for the payment of a lump sum representing the estimated revenue due from the inhabitants of the three towns. It was fixed as follows:—

				Rs. a. p.
Dehi-Calcutta	..	..	..	468 9 9
Sutanati	..	..	..	501 15 6
Govindpur in Pargana Paikan	..	..	..	123 15 3
Govindpur in Kalkata	..	..	..	100 5 11
				<hr/>
				1,194 14 5
				<hr/>

The Company was "to pay the same rent to the King as the Jimmidars successively have done." The Jimmidars of the said towns "were ordered to make over their right and title to the English upon their paying to the Jimmidars Rs. 1,000 for the same." The Jimmidars were unwilling to part with their country, threatening to complain to the King (i.e., Emperor) of the injustice of the Prince (i.e., Nazim) in giving away their country which they had so long in possession." The Nawab "had an officer upon them

to bring them to a compliance," till they agreed to surrender their Zemindari and "relinquish their titles to the same towns" on payment of Rs. 1,500 to them [Consultations of 31st October, 1698].

In consideration of the responsibility of paying the land revenue of the district as fixed above, the English as Zemindars obtained by their transaction with Azim-Ush-Shan the following three rights :—

- (1) To collect the rent from the ryots.
- (2) To dispose of the waste lands in any way they liked.
- (3) To impose petty taxes, duties and fines.

Under (1) the Company was empowered to collect from the Ryots the rent of Rs. 3 per bigha as a maximum. After paying the land revenue, the average monthly balance to the credit of the Company amounted to Rs. 480 in 1704. In 1732 the Company tried to raise the rents of its Calcutta Zemindary but "received a peremptory Perwannah from the Soubah (i.e., Governor) forbidding them ; in which the Soubah told them that they were presuming to do a thing which he had not power to do ; and if they persisted they would by the laws of the Empire forfeit their lands." This passage shows that the rent of the *Khud-khast* Ryots in those days could not be increased beyond the established rate or *Nirikh*.

The Company, however, regarded itself as a full-fledged Zemindar and exercised the functions of that position. The question of the Zemindary brought with it increased work and responsibility for which an additional member was appointed to the Company's Council and was given the title of Zemindar or Collector. Ralph Sheldon was the first Collector of Calcutta appointed in 1700. The succession of Collectors of Calcutta is unbroken to this day. Holwell was one of the Collectors of Calcutta in the year of the so-called Black Hole Tragedy.

In accordance with the Zemindary customs of the day, the English Zemindars of the three towns aforesaid acted as Magistrate or Police and held Court in which petty offences and cases of revenue dispute were decided. Warren Hastings, however, in 1775 did not admit this position of the Zemindar in the administration of justice, as explained by him in the "SIXTH REPORT OF THE PARLIAMENTARY COMMITTEE OF SECRECY IN 1773", but a careful study of the subject shows that the Committee correctly represented the Company's earliest conception of the Zemindar's duties. These duties are described fully in BOLT'S "CONSIDERATION OF INDIAN AFFAIRS."

It will thus appear from the above evidence that the city of Calcutta was built up on the basis of a Zemindary with its revenue fixed under a Permanent Settlement. In 1715, the Company tried to improve its position further in Bengal by sending an embassy to the Emperor with an application for the purchase of Zemindary rights in thirty-eight additional villages on payment of the same rent as was fixed with previous Zemindars. The Company further stated : "We have hopes they will be granted to us, because we shall be punctual in paying our rent on the day and at the place appointed, which

Jimidars are not always." The Emperor, Farrukh Siyar, granted this application but the masterful Governor of Bengal, Murshid Quli Khan, refused to give effect to the Emperor's order in allowing the English Zemindary rights in more towns. This gave the English the ground of a standing quarrel with the Local Government of Bengal under the Nawab, which they might take up any time. Indeed, this was one of the reasons put forward by Lord Clive in breaking with Siraj-ud-daula. Later, however, Siraj-ud-daula, by a treaty of February 1757, consented to the Company's acquisition of Zemindary rights in these thirty-eight villages.

Simla Patni.—This setback in the expansion of the Company's hold on Bengal through the Zemindary and Permanent Settlement was somewhat retrieved in 1754 by the energetic Collector of Calcutta, Mr. Holwell. "On 8th August of that year," as the President and Council wrote home, "Holwell in a letter to the Board informed us he had been at some pains to prevail upon the proprietors of a spot of ground called Similia to rent it to your Honours for the sum of Rs. 2,281 which he required our permission to take on your account as the situation (being a part of Calcutta in a manner itself) had many advantages and its revenues yielded in its present management more than the sum we should pay and he did not doubt will produce considerably more when in our hands." This shows that the Company, besides taking advantages of the Zemindary system to extend their hold on the country, was also utilising the system by acquiring permanent tenures from the Zemindars of the day, as *Patni-dars*.

Zemindary of 24-Parganas.—The next development of the Company as Zemindars centres round the transactions relating to the acquisition of the 24-Parganas. As is well known, Clive entered into a secret treaty with Mir Jafar on 3rd June 1757 prior to his victory of Plassey, because he found that his earlier treaty with Siraj-ud-daula of 9th February 1757 was not quite satisfactory. This treaty with Mir Jafar contained clauses which ran thus:—

"Within the Ditch which surrounds the borders of Calcutta are tracts of lands belonging to several Zemindars; besides this, I will grant the English Company six hundred yards without the ditch."

"All the lands lying to the South of Calcutta, as far as Calpee, shall be under the Zemindary of the English Company and all the Officers of those parts shall be under their jurisdiction. The revenue to be paid by them in the same manner as the other Zemindars."

The text of this treaty as given in HILL'S "BENGAL IN 1756-57 (Volume II, page 384)" is somewhat differently worded:—

"That the Country to the South of Calcutta, lying between the River and the Lake and reaching as far as Calpee, shall be put under the perpetual government of the English, in the manner as now governed by the Country Zemindars, the English paying the usual rents for the same to the treasury."

Problems of its Settlement.—After their victory of Plassey, the Company lost no time in giving effect to the terms of this treaty and securing their promised Zemindary. The first step necessary was a survey of the tract for which the Nawab sent an experienced *Kanungo* “to take an account of the Lands, Villages, Districts, Revenues and other particulars of the territory from the great Lake Eastward of Calcutta as far as Calpee on the South.” The Company also deputed their own Staff to accompany the Nawab’s Agent. Captain Robert Barker was deputed for the purpose, together with Captain William Swallow who was an Artist and a Seaman. William Frankling was appointed as a Collector of the new lands and was entrusted with the task of compiling a statistical survey of these. Franklin’s report was a general abstract of all the Parganas to the Southward of Calcutta and pointed out in a very substantial manner “the quantity of grounds contained in each of these Parganas, the number of villages, markets, Zamindars and farmers, whatever ground is assigned to the ‘*Gentoo*’ (Hindu) Idols, to servants, etc., what quantity lays barren and uncultivated and the net number of bighas that pay rent to the Zamindars.”

For the first sixteen months after acquiring this new Zemindary, the Company kept the collections of Revenue in their own hands. In May 1759, however, they decided to let out the revenues to farm for a term of three years and on the following among other conditions viz. :—

- (a) “That rents be not increased on the Ryots of the present tenanted Ryotty grounds except where jungle grounds are cleared.
- (b) “The Farmer is not to turn out any Ryots that duly pay their rents agreeable to their *Pattahs*.
- (c) “No tree is to be cut down without leave.
- (d) “The Farmer is to collect and receive rents from the Ryots as usually have been collected by the former *Izardar*.
- (e) “He is also to repair all Banks, Dams and Drains as customary.”

In June 1759, a number of people came forward with an offer to pay net collections of the first year and an excess of Rs. 1,01,001 and to submit to a penalty if it could be proved that they had “increased any tax or sum upon the Ryots more than common.” On this offer, Holwell, on 11th June 1759, remarked that “keeping the lands in our hands will never lead us to the knowledge of their real value.” He, therefore, proposed to put them up to public auction by single Pergannas under the restrictions already stated.

To these proposals, the “*Ijaradars*” or Revenue Farmers of those days whom the English found in possession entered their objections and made the following representation :—

“That the principal part of your Petitioners are the ancient Farmers of the Company’s new acquired lands, and have, with great care and labour, as well at great expense, cleared the same from jungles, removing the savage inhabitants of the woods, in order to people

the lands with human species, and by an indefatigable, unwearied industry of a period of years, have the happiness to see their labours rewarded and the lands flourish; for the still greater encouraging and promoting of which, their ancestors removed themselves and families and planted themselves in the heart of the new farmed lands, where they built their habitations, and by their presence and gentle treatment had the pleasure to see their tenants duly increase, whom they looked upon and treated as part of their family, and who were always ready on the least call to assist on any emergency, by which means all dacoits, thieves, etc., have ever been kept out of these lands; nor would so much of the lands have been barren and waste as there is at present, had not a check been put to our industry by the unjust and exorbitant taxes put upon the lands by the Zamindars (or rather by the different Nabobs) for which even the flourishing state we had brought the lands to has been declining for some years past, and the results have been constantly decreasing; when, on the cheerful news of the Honourable Company's being to have possession of them, we were again revived with the pleasant hopes that we should see them rise under our care, not only to that flourishing state they were in some years ago, but by the mild and just Government of our hoped for new masters, we should in the future years have the satisfaction to see every Beegha of ground produce its proper harvest to the honour and glory of the Honourable Company."

It will thus appear that the Council of the Company had before them in 1759 the very problem which was to engage the anxious consideration of the English Revenue Administrators up to the date of Lord Cornwallis' Permanent Settlement in 1793. The choice of the Company lay between the following methods of dealing with Land Revenue, viz:—

- (a) Collecting the revenue direct from the cultivators or their representatives;
- (b) Collecting it through the local agents or lessees used to such collection;
- (c) Letting out the Collections to speculative Capitalists to farm.

In 1759, the English decided in favour of the third method under the advice of Clive who agreed with Holwell. The Parganas were thrown into fifteen lots each of which was farmed out for three years to the highest bidder at public auction. When this arrangement expired in 1762, the Company proposed to keep the Parganas in its own hands for the year. The Committee that was appointed in charge of the new lands doubted Holwell's theory that the putting up of the revenues to farm afforded the simplest means of ascertaining the value of the farms. It was found that the bids of revenue farms made at public auctions were as a rule of the nature of speculation. Such speculation led to rack-renting of the cultivators or to the farmers' absconding or bankruptcy.

The Company as Zemindar undertook the obligation of paying the permanently settled annual revenue of Rs. 2,22,958 to the Nawab. On July 13th, 1759, the revenue of the 24-Parganas was assigned to Clive as a *Jaagir* in return for services rendered to the Emperor. On June 23rd, 1765, this grant was confirmed for a period of ten years after which the rights would pass to the Company free of all revenue charges due to the Emperor.

Zemindary of Ceded Districts.—Besides the extension of the Company's Zemindary, the Company was able to secure from Nawab Kasim Ali Khan who replaced the dismissed Mir Jafar a large tract free of all revenue, to enable the Company to meet the expenses of the Army which it had to keep up in aid of the Nawab. It was really the price paid by Kasim Ali Khan for his elevation to the throne. This tract comprised the three districts of Burdwan, Midnapore and Chittagong and was ceded by a treaty of September 27, 1760. The grant was renewed by Mir Jafar on his restoration on July 6, 1763, and was finally confirmed by the Mogul Emperor on August 12, 1765.

British Rule founded upon Zemindary Property and Military Power.—It is thus clear from the above account that the British Rule in Bengal had itself been founded upon the Zemindary system under Permanent Settlement. It was the Company's acquisition of Zemindary rights in the three villages of Calcutta in 1698 followed by the acquisition of the same rights in 24-Parganas in 1757 and in Burdwan, Midnapore and Chittagong in 1760 that really gave to the English a secure footing in the country from which they could not be dislodged. The consequences of the Battle of Plassey to the growth of British Dominion in Bengal have been somewhat exaggerated. Plassey cannot even rank as a great military achievement. In Holwell's words, "the victory was solely owing to the treason and treachery of Ray Durlov and Mir Jafar", and the inactivity of Siraj-ud-daula's reputed allies secured by the intrigues of Watts. It will also appear that Siraj-ud-daula's capture of Calcutta in 1756 was answered by its recapture by the Company by armed force in 1757. And yet the English abstained deliberately from holding the town on the terms of a military conquest but sought instead and obtained *Sanad* from the Nawab for the free tenure of the City. The fact is that the English occupation of Bengal was being effected by a very different process, by the acquisition by the English of their status and rights as Revenue Officials under the Mogul Emperors. It was essentially as Revenue Collectors that the English really entered into the actual occupation of the country. Thus the history of the English occupation of Bengal is more a logical consequence of Revenue Administration than of a military conquest. Neither Plassey nor Buxar were fought to win territorial sovereignty by the East India Company. Their purpose was only to secure a ruler who would be powerless to uproot the British factories. Trade was more their concern than territory at this time. The Court of Directors in their letter of 3rd February 1719 pointed out in connection with the Company's application to Emperor Farrukh Siyar for the acquisition of revenue rights in 38 Villages, as stated above, definitely expressed the opinion: As our business

is trade, it is not political for us to be encumbered with much territory." And yet they passed this comment on a proposal not to acquire lands to be held in sovereign power by the Company but to be held only on terms of Zemindary tenure. The securing of such Zemindary rights could not be construed as the acquisition of territory.

It could not, however, be denied that ultimately the East India Company created an Empire by calling itself a Zemindar. The acquisition of Zemindary rights suggested to the Court of Directors in England the contingency of defending them from the inroads of neighbouring petty Governors. The Directors intended that the rights obtained by process of Mogul law would necessarily be maintained by military force. It is, therefore, true to state that though the English occupation of Bengal was effected by the process of Mogul law, yet behind this legal settlement there was going on, as a parallel to this process, a process of gradual conquest of the country by which the native military force was being increasingly superseded by British military power. In this sense, it may be said that Plassey and Buxar secured Bengal for England. History has no knowledge of an actual conquest of Bengal by the sword, and yet there was the sword which, if not actually drawn to secure dominion, was inherent in the power that lay behind the civil settlement by the English. What was actually happening in these fateful times in Bengal was that the English step by step were destroying the military supremacy on which the Muslim power in Bengal depended, while at the same time they monopolised the revenue of the country for the maintenance of their own troops and garrisons. The stages of this process may be indicated by reference to certain treaties :—

- (1) With Siraj-ud-daula in February 1757 : "That the Company be allowed to fortify Calcutta in such manner as they shall deem proper for their defence without any hinderance or obstruction."
- (2) With Mir Jafar on 15th July 1757 : "Whenever I demand the English assistance I will be at the charge of the maintenance of them."
- (3) With Mir Kasim on 27th September 1760 : "The Europeans and Telingas of the English Army shall be ready to assist the Nawab Mir Muhammad Kasim Khan Bahadur (i.e., Mir Kasim) in the management of all affairs ; and for all charges of the Company and of the said army the lands of Burdwan, Midnapore and Chittagong shall be assigned."
- (4) With Mir Jafar on 10th July 1763 : "The forces of the English Company shall always attend me when they are wanted ; what number of English forces I may have occasion for in the management of my affairs I will demand them and they shall be allowed me."
- (5) With Nazm-ud-daula in February 1765 : "I do confirm to the Company as a fixed resource for defraying the ordinary expenses of their troops the Chaklas of Burdwan, Midnapore and Chittagong in as fully a manner as heretofore ceded by my father."

This process of depriving the Nawab of military power was an essential factor in the foundation of British rule in Bengal. The fact of the matter, therefore, is that, although up to 1765 all land that was held by them in one way or other was held on the basis of Mogul Revenue Law, and although Calcutta itself was a Zemindary in respect of which the Company had originally entered into a customary agreement (*Muchalka*), and although the districts of Burdwan, Midnapore and Chittagong were also ceded to the English by way of a Zemindary settlement, it must be remembered that even in 1765 it would not be enough to say that the English had merely acquired a certain civil position, when, at the same time, they had been invested by the very ruler of Bengal with a military power. The civil and military processes worked hand in hand and between them finally established British Dominion in Bengal.

Other Zemindars of the times.—We have already referred to the rise of the Zemindars in Mogul times. Evidence is lacking regarding the actual dealings of Akbar's Revenue Officers with the Hindu Rajas of Bengal. But great landed estates were already there and new ones were also coming into existence after Akbar's conquest of Bengal.

Bara-Bhuiyas.—Of these, the most important is a group of powerful Zemindars known as *Bara-Bhuiyas* of Bengal such as (1) Chand Rai and Kedar Rai of Bikrampur; (2) Fazl Ghazi of Bhowal; (3) Lakhan Manik of Bhula; (4) Kandarpa Narayan Rai of Chandradwip; (5) Ish Khan Masuad-i Ali of Khizrpur; (6) Raja Pratapaditya of Jessore; and (7) Mukunda Ram Rai of Bhusna. Some of these were powerful enough to resist the Moguls. Pratapaditya offered resistance from 1603 till he was defeated at a battle at Dhum Ghat in 1611. His son Udayaditya continued the fight till he was killed. At the same time, Kedar Rai of Bikrampur defied and defeated the Mogul army. Man Singh then proceeded against him, besieged his capital at Sripur, and killed him in battle. Mukunda Ram Rai and his son Satrajit similarly fought the Moguls up to 1636.

Burdwan.—The Burdwan Raj was founded by a business man from Lahore named Sangam Rai. His grandson Abu Rai was appointed by the Mogul Government as *Chaudhuri* and *Kotwal* of Rekabi Bazar in the town of Burdwan under the *Fauzdar* of *Chakla* Burdwan. His descendant Jagat Ram Rai, by a Farman of Emperor Aurangzeb issued in 1699, A.D., was recognised as Zemindar and Chaudhuri of Burdwan and other Parganas comprising fifty Mahals. By a Mogul Farman of Emperor Muhammed Shah the Mahals of Fatehpur and the Zemindary of Bishnupur were added to the Burdwan estate. The then Raja of Burdwan, Kirti Chand Rai, made further additions to his estate by military conquest of the estates of the Rajas of Chandrakona and Bardha and also the Balghara Raj in the Hooghly District, besides acquiring the Parganas of Chitwa, Bhursut, Bardha and Manoharsahi. His successor Chitra Sen Rai made further additions to the estate in the Parganas of Mandal Ghat, Arsha and Chandrakona under a Farman from Emperor Muhammed Shah who conferred upon him the title of Raja. In 1755, Tilak Ghand stopped

the transaction of all business by the Company within his domain and seized their effects. In 1760, he threatened to join the Marāttas and to seize Murshidabad and attack the English with his forces. In 1764, A.D., Emperor Shah Alam II by a Farman created Raja Tilak Chand as Raja Bahadur, and also master of four thousand infantry and two thousand cavalry, while by another Farman issued in the year 1765, the Taluks of Bhadiā and other places were added to the Chakla Burdwan estate. Another Farman of the same Emperor Shah Alam issued in 1768, A.D., created him a *Maharajadhiraja* and a *Panch-Hazari Zat*, i.e., Commander of five thousand infantry with further permission to keep three thousand cavalry and guns. After this the Burdwan Raj came under Permanent Settlement.

Natore and Rajshahi.—A notable figure of the times was Sitaram Rai who was appointed by the Moslem authorities to realise arrears of revenue from certain influential defaulters. He soon utilised this opportunity to build up for himself a vast estate and then became himself a defaulter. This resulted in his capture and consequent execution some time before 1717, in which year the English in Calcutta were called upon to produce the persons of his widow and children. The dismemberment of Sitaram's estate was followed by the rise of the *Natore* family. According to one account, Odynarain, the Zemindar of Rajshahi, was chosen by Murshid Quli Khan to take charge of his *Khalsa* collections. Very soon, however, the relations between the two became strained. Odynarain dreading the Nawab's displeasure committed suicide. The Zemindary of Rajshahi was then conferred upon Rajewan and Ranookhewa.

Another version of the story is given by Sir John Shore in his "Minute of the 2nd April 1788". In 1707, the small Zemindary of Bungachi was bestowed upon one Raghunandan. In 1711, Raghunandan acquired the Zemindary of Bhetoriah on the death without issue of Rani Sarbani. In 1713, he was allowed to annex Rajshahi as a reward for his capture of Odynarain. On the death of Sitaram Rai, Raghunandan acquired the Zemindary of Bhysna. In 1713, Ramjewan, in whose name the Zemindary had been secured, died, and in 1733, his adopted son, Ramkanta, was confirmed as Zemindar by *Sanad*. The famous Rani Bhavani was Ramkanta's widow.

Other Zemindars of the times who offered submission to the Moguls before hand were Ranbir Khan of Naldanga, Raghab Sidhantabagish of Kusadaha and Luxmi Kanta Mazumdar of Subarna Chaudhuris of Barisha. There were also the Zemindars of Dinajpur, Lashkarpur and Putiya. The Thakurs or Rajas of Putiya, the oldest territorial aristocracy of Rajshahi, are said to have acquired it from Laskhar, an Officer of Murshid Quli Khan. The founder of the Naldanga family, Ranbir, came into the possession of his estate by exterminating the family of an Afghan Zemindar by the power of his arm.

The East Company as Dewan was also making settlements on a temporary basis with the Zemindars of the districts. For instance, the Zemindar of Rangpur is mentioned in a document of 1777. The proceedings of the Controlling Council of Revenue at Murshidabad mention the Raja of Birbhum

who "ranks high in the class of distinguished Zemindars of this country." The Zemindar of Taherpour is referred to in the aforesaid Proceedings, dated the 6th February 1772. There was also the Raja of Sasang in Mymensingh or the Zemindar of Bykuntpur in Rangpur, who were both like semi-feudatory chiefs.

Older Zemindars.—We may mention in addition the older houses of Zemindars like the Rajas of Bishnupur and Birbhum who functioned as Wardens of the Western marches and who on account of their historic position were exempted even by Nawab Murshid Quli Khan from the operation of some of his drastic financial measures. There were also the Rajas of Tipperah, Cooch Behar and Nadia of the same status whose titles were based upon hereditary right rather than official grant.

Position and Rights of Zemindars.—It cannot, however, be denied that the term Zemindar at the time of the Diwani came to have a wider denotation under which were brought together several classes of Zemindars, not merely the representatives of ancient Hindu sovereignty but also Government Farmers who in recent years had acquired their Zemindaries by inserting themselves in the places of the dispossessed; while the term might also include the occupant of only a single Pargana. Leaving aside the issue as to ownership and property rights in land, it may be stated that all these kinds of Zemindars had a common function to perform in regard to the State. They were one and all answerable for the yield to Government of the sovereign's portion of the harvest in kind or in pecuniary equivalent on the threshing floors of the cultivators and this function was expressed in writing by the terms of the sanads or patents of appointments. From the point of view of his obligation to the State, the position of the Zemindar was not unlike that of a Revenue Farmer. The historical Zemindary is not the Zemindar's private estate but the Pargana or the group of Parganas for which the Zemindar is bound to make good to Government the payment of the Land Revenue. To dispossess the Zemindar of his Zemindary is not necessarily to deprive him of his household and Khas lands but only to assign to another the profitable employment of collecting from the dependent ryots or cultivators the revenue assessed on their holding and retaining a commission on the revenue so collected. Thus, the term Zemindary means the following :—

- (1) The right to the revenue share ;
- (2) The right to dispose of waste and unoccupied lands ;
- (3) The right to certain mineral royalties, forest produce, etc.

The position of the Zemindar and his exact rights have been the subject of much controversy among the leading Officials of the East India Company. Warren Hastings considered the subject of the Zemindar's right of property in land as being even then a merely abstract question. But perhaps the subject may be best understood in the light of the terms embodied in the sanads of those days creating the Zemindaries. A sanad issued by ~~Nawab~~ Sar Faraz Khan, Diwan of Bengal, under Emperor Muhammed Shah in 1753

A.D., confers the service of the Zemindary of Rajshahi Pargana upon Ram Kunt on condition that "he pay into Royal treasury the peishcush, etc. and the balance, according to kistbundy; and discharge year by year at the stated times and periods, the due rents, after receiving credit for muzcoorat, nankar, etc., agreeable to usage"; "that he conciliate and encourage the Ryots, and promote the advancement of cultivation, the improvement of the country, and the increase of its produce; that he take special care of the high-roads, so that travellers and passengers may pass and repass in perfect confidence; and, if at any time the property of any person shall be stolen or plundered, that he produce the thieves and robbers together with the property; and, deliver the latter to the owner; consign the former to punishment; that in case he do not produce them, he himself become responsible for the property; that he exert his vigilance that no one be guilty of drunkenness or irregularities of behaviour within the boundaries of his Zemindary; that he refrain from the exaction of the abwabs prohibited by the Imperial Court; and that he deliver into daftarkhana of Government the official papers required, conformable to custom, signed by himself and the Kanungos of the Suba". "When a Zemindar was divested of authority it was a rule of the Mogul Government to allow him a subsistence out of the rents of his Zemindary in proportion to the annual income of it. This proportion usually amounted to a tenth". This fact has been stated in a letter to the Court of Directors, dated 3rd November 1772, by Warren Hastings and his Council. The Company secured the Zemindary of the 24-Parganas by the dispossession of the legal proprietors to whom Warren Hastings strongly recommended the payment by the Company of proper compensation.

In the "Great Rent Case", a full Bench of the Calcutta High Court decided that the Zemindar cannot be supposed to be invested with an absolute right to the soil although Regulation I of 1793 describes the Zemindars as "actual proprietors of the soil." Grant pressed the view that the Zemindar had no permanent right whether as proprietor of the soil or as an official whose duty was to collect and to pay the rent to the Sovereign. This view was anticipated in the policy of Murshid Quli Khan and the East India Company's Quinquennial Settlement. But this is not the correct view of the subject. In Mogul times all offices had tended to become hereditary and accordingly permanent. This applied as much to the Zemindar as to the Kanungo whose office became hereditary in course of time. Even at the time of Murshid Quli Khan when the status of Zemindar was practically extinguished, a *Sanad* of the year 1728 expressly recognises the right of the dispossessed Zemindar to receive an allowance. This certainly proves that the Zemindar was more than a mere temporary official removable at will. At the same time Sir John Shore was wrong in taking the other extreme view that the Zemindar was the absolute owner of the soil. Even in the grant of the 38 villages to the East India Company by which the Company was granted a full Zemindary right, it is specifically stated that the Company should merely "have the rent of the towns petitioned for" (East India Records, Book No. 593).

The Company as Dewan.—It was in 1758 that the Mogul Emperor first proposed the, *Dewani* to the Company, so that he might receive payment more regularly of the revenue due to him from Bengal. This revenue was "of late years very ill-paid." Again, in 1761, this offer was repeated personally by Emperor Shah Alam to Major Carnac on condition that the Company would guarantee the remission to him of the Emperor's share of revenue due from Bengal. That share amounted to 50 lacs which Clive counted at a fifth of the then total revenues of Bengal [Clive's Letter to Pitt of 7th January, 1759]. This offer was repeated by the Emperor in 1763. Then in 1764, Lord Clive, on his way to Allahabad to see the Emperor, stopped at Murshidabad and asked the advice of Raja Daulat Ram (father of Maharaja Raj Ballabh) what representation he should make to the Emperor in regard to the affairs of Bengal. Raja Daulat Ram suggested to Lord Clive that "he should ask for a *Sanad* of the *Diwani* in favour of the Company which being obtained the entire management of the country would devolve into the hands of the Company." In 1765 Lord Clive, thus acting on the advice of Raja Daulat Ram, secured from the Mogul Emperor Shah Alam the *Sanad* or Official grant of the *Dewani* of Bengal for the East India Company. As has been already stated, the *Diwani* was an Office which Emperor Akbar had created in 1579 mainly as a check upon *Nawab-i-Nazim* of the Bengal Subah as a useful counterbalance to him. About 150 years later, as the Mogul Empire declined, Murshid Quli Khan, as we have seen, appropriated to himself the two Offices of both *Nizamat* and *Diwani*. The grant of the *Diwani* now made to the East India Company in 1765 once more separated the two offices of the *Nawab* and the *Diwan* and recalled the original plan of Akbar. The *Nawab* was once more confined to the political, military, and criminal duties.

Zeminders and Kanungos.—Although the *Diwani* was thus held by a corporation of foreigners, they could count upon the help of a complete cadre of hereditary native Officials to help them in the collection and administration of revenue. The most important of these hereditary revenue Officials were (a) the Zemindars and (b) the Kanungos. The Zemindars were created by *Sanads* of the Emperor authorising them to collect the Land Revenue of specified Parganas or Districts. It was understood in those days that "if a Zemindar performed his customary duties attached to a Zemindary it was practically impossible to dispossess him by constitutional methods" (RAMSBOTHAM'S "LAND REVENUE HISTORY"). The Office of the Kanungo was originally created by Akbar as a check upon the Zemindar. He was to keep the Central Government informed about the collections of Zemindaris and to protect the Ryot, with the assistance of his colleague, the *Patwari* or the village Accountant. As Offices then were hereditary, the Kanungos in course of time became the depositories of most valuable information regarding the revenue returns of the Zemindaries, and the statistics upon which Land Revenue assessment depended. He was thus the link of connection between the sovereign at the top and the Parganas below. The Zemindars

and the Kanungos, therefore, together formed a powerful confederacy who had between them monopolised all knowledge of the rents paid by the Ryots to the Zemindars and details of assessment. When the Company assumed the *Diwani*, it was their first business to obtain the knowledge of the rents paid by the Ryots to the Zemindars as the basis of Land Revenue Assessment and collection. The period between 1765-1793 was marked by a series of efforts made by the Company to obtain this knowledge.

It is to be noted that the Company was not entirely new to this work of collection of revenue in Bengal. The grants of Calcutta in 1698, the 24-Parganas in 1757, and the cession of the three districts of Burdwan, Midnapore and Chittagong, free from all revenue, in 1760, already gave the Company some experience of the collection of revenue and administering these districts through its own Agency.

Periods of Revenue Administration.—Under the terms of the *Diwani* the East India Company was to pay an annual sum of Rs. 26 lacs to the Mogul Emperor and to appropriate for themselves all excess over the above sum in the collection of the total revenue from the three provinces of Bengal, Behar and Orissa, after paying all the expenses of the *Nazim's* establishment. By agreement, a sum of Rs. 17,78,854 was payable by the Company to the *Nazim* for his household expenses, and Rs. 36,07,277 for the rest of the *Nizamat*. Later, as the *Nazims* became more and more incompetent, the *Nizamat* allowance became less and less. The original amount of 53 lacs was reduced to 41 in 1766, to 32 in 1769, and to only 16 lacs under Warren Hastings. The Company now had to undertake the Revenue Administration and absolute financial control of three provinces. The period of Revenue Administration from 1765 to 1793, the date of the Permanent Settlement, may be roughly divided into four periods on the basis of certain characteristics of each. These were :

- Period I (1765-1773) : a period of hesitation ;
- „ II (1773-1781) : a period of centralisation ;
- „ III (1781-1786) : a period marked by completion of centralisation ;
- „ IV (1786-1793) : the period of decentralisation.

PERIOD I (1765—1773).

Appointment of British Supervisors.—From the assumption of the *Diwani*, the Company was forced to employ as their *Naib-Diwan* Muhammed Reza Khan who was already practically acting as both *Nazim* and *Diwan* owing to the youth and incompetence of the then *Nazim* Nazm-ud-dula. There was no other alternative for the Company except, to employ the existing indigenous agency of *Amils*, *Tehsildars*, etc., for the collection of revenue.

Reza Khan was given a salary of Rs. 9 lacs per annum, Roy Durlabh, his Deputy, 2 lacs and Shitab Roy at Patna about Rs. 1 lac per annum, to which Lord Clive and Select Committee added a further sum of Rs. 3 lacs per annum.

The Company's authority at the *Nizamat* at Murshedabad was represented by a Council of Control and a Resident.

The Select Committee at Calcutta was the Company's supreme authority in matters of revenue with Verelst as its President.

Verelst as Governor.—Verelst succeeded Clive as Governor of Bengal and President of the Council in 1767.

The indigenous agency for collection of revenue was not, however, found to be working satisfactorily. There were large arrears of revenue at "Dinapore, Houghley, and Purneah", as compared with the "affluent state of the Talooks in Burdwan", as stated in the letter of the Court of Directors of 11th November, 1768.

In the same letter, the Directors for the first time "point out the great utility of letting the lands on long leases".

In their letter dated June 30, 1769, the Directors further state: "We find the revenues of the Calcutta lands, as well as Burdwan, Midnapore, and Chittagong have been considerably augmented" as being "under the Company's management and the constant and minute direction of our covenanted servants".

Henceforth the Company started thinking of ways and means for assuming the direct administration of Revenue.

In terms of the same letter, a "Comptrolling Council of Revenue" was constituted at Murshedabad, and another at Patna, on 13th July 1770, with Reza Khan and Raja Shitab Roy as *Naib-Dewans*.

In connexion with this change of attitude the Court of Directors were careful to point out: "Our intention is to proceed in this work (of revenue collection) without taking off from any of those profits and emoluments which have usually accrued to the Zemindars who have inherited their lands from their ancestors. We have no view to prejudice the rights of the Zemindars who hold certain districts by inheritance."

Other administrative arrangements followed the instructions of the Court of Directors, dated 23rd March 1770. The Council of Bengal was to consist of 9 members, and an inner Cabinet of three Senior members of the Council under the Governor was constituted and designated as *Select Committee*.

In the meanwhile, Governor Verelst in anticipation of the trend and change of opinion, posted English revenue officials called *Supervisors* in the important Districts under the Dewani in 1769.

Becher on Zemindars and Aumils.—The state of affairs as they stood at this time (1765—1769) is best summed up in an authoritative description sent by Richard Becher, as President of Murshedabad Council, to Governor Verelst, on 24th May 1769: "Since the accession to the Dewani, the condition of the people of this country has been worse than before... This fine country, which flourished under the most despotic and arbitrary Government, is urging

towards its ruin, while the English have really so great a share in the administration... In Aliverdy Cawn's time, the amount of the revenues was much less, but then the Zemindars, Shroffs, merchants, etc., were rich and would, when an emergency required it, supply the Nawab with a large sum.... The custom then was to settle a *Malguzarry* with the different Zemindars on moderate terms. The Zemindars had a natural interest in their districts and gave proper encouragement to their ryots; when necessary would wait for their rents, and borrow money to pay their own *Malguzarry* punctually. There were in all the districts Shroffs ready to lend money to the Zemindars and even to the ryots—which enabled many to cultivate their grounds, which otherwise they could not have done... At one time, the zemindars, etc., paid the Nawab the enormous sum of Rs. 1 cror, and 50 lacs at another time, besides paying the *Malguzarry*.

"I mention this only with a view of showing what this fine country is capable of under proper management. When the English first received the grant of the Dewani, their first consideration seems to have been the raising of as large sums from the country as could be collected to answer the pressing demands from home and to defray the large expenses from here. The Zemindars not being willing or able to pay the sums required, *Aumils* have been sent into most of the districts. The man that has offered most has generally been preferred. What a destructive system is this for the poor inhabitants! The *Aumils* have no connection or natural interest in the welfare of the country where they make the collections nor have they any certainty of holding their places beyond the year. Uncertain of their office, and without opportunity of acquiring money after their dismissal, can it be doubted that the future welfare of the country is not an object with them? Nor is to be expected in human nature. These *Aumils* also have had no check upon them during the time of their employment. During the time of the year's collection their power is absolute. On this destructive plan, and with a continual demand for more revenue, have the collections been made ever since the English have been in possession of the Dewani."

Settlement with Zemindars.—In consultation with Becher, Verelst in June 1769 allowed to Zemindars considerable reductions of revenue in view of the distressed condition of the country. For instance, substantial deductions of revenue were made in the cases of (1) Rani Bhawani, Zemindar of Rajshahi and (2) the Zemindar of Birbhum.

"Supravisors."—At the same time, George Gustavus Ducarel was deputed to Purnea to look after the collections. This was the precedent for the appointment of British "*Supravisors*" in the Districts. *Supravisors* were appointed under the Comptrolling Council of Murshedabad for the following Districts: (1) Dacca, (2) Hughli, (3) Birbhum, (4) Tippera, (5) Purnea, (6) Dinajpur, (7) Jessore, (8) Nadia, (9) Rajmahal and Bhagalpur, (10) Rajshahi, and (11) Rangpur.

Land-Tenures of the times.—The *Supervisors* were instructed to collect “a summary history of the province, an account of its leading families not older than the reign of Sujah Cawn”; make a report on the condition, capacity, and produce of lands on the basis of the extant *Hastabood* or revenue-rolls to be checked by them by local inspections on the spot; to ascertain “the amount of the revenues, cesses, arbitrary taxes, and of all demands levied on the ryots;” and also the areas under (1) “*Talooks*” and “*Jaigheers*,” originating in grants or gifts, of which the tenants “are possessed of so many indulgences and taxed with such evident partiality and tenderness in proportion to the rest, that the *Talooks* swarm with inhabitants whilst other parts are deserted”; (2) “*Sequestered Lands* as charitable or religious donations”; (3) *Coss* (Khas) lands awaiting cultivation; (4) *Comar* (*Khamar*) lands “having no native tenants and cultivated by contract,” i.e., by *Bargadars* “on $\frac{1}{3}$ or $\frac{1}{2}$ of produce”; and (5) “*Ryoty Lands*” as entered in “the *Pottas* granted”. This shows the various kinds of land-tenure prevailing in the time of the *Dewani*.

Failure of Supervisors—The idealism of this scheme received a rude shock. It was impossible for foreign officials to get at the data and secrets of cultivation and the rents paid by the ryots or tillers of the soil. It was not to the interest of the indigenous revenue agents, the *Zemindars*, *Kanungos*, or *Aumils*, to reveal the sources and secrets of their living. Becher doubted the scheme and on October 10, 1769, wrote to Verelst not to hurry with it, pointing out that “the people in the district will look at the *Supervisors* with jealous eyes, and withhold every information” and suggested that the *Supervisors* might be tried first in “the farmed districts” such as *Purnea*, and not where the *Zamindars* were the Collectors of revenue.

In 1771, the Court of Directors formally approved the scheme and “waited with impatience for the issue of the *Supervisors*’ researches”. In 1772, they thought it necessary to curtail the powers of the *Supervisors* by limiting their postings to two years so that they “be not directly or indirectly engaged in trade in their districts”. In 1773, they actually expressed the opinion that the *Supervisors* were not “the success wished for” and directed that “they be withdrawn as soon as possible,” their position having only “enabled them to monopolize the whole trade of the country.” Researches on the spot into the sources of rent and revenue only revealed to them the sources of their private gain from trade in the interior. Later, in his great controversy with Warren Hastings, Philip Francis took a more drastic view that “the anxiety of English Officials to acquire an exact knowledge of local investigation arose from an anxiety to wring out of the land the utmost short of effecting the ruin of the country”.

Governor Cartier.—Other administrative changes followed rapidly. On December 24, 1769, Verelst left and was succeeded by John Cartier, who was Governor from 1769 to 1772.

Famine of 1770.—His administration was blighted by the great famine of 1769-1770 which, according to Warren Hastings, carried away "at least one third of the inhabitants of the province". Its horrors are thus described in the form of a poem by Sir John Shore :

"Still fresh in memory's eye the scene I view,
The shrivelled limbs, sunk eyes, and lifeless hue ;
Still hear the mother's shrieks and infants' moans,
Cries of despair and agonizing groans.
In wild confusion dead and dying lie ;
Hark to the jackal's yell and vulture's cry,
The dog's fell howl, as, midst the glare of day,
They riot unmolested on their prey ;
Dire scenes of horror, which no pen can trace,
Nor rolling years from memory's page efface".

It was widely believed that this famine was due to unscrupulous commercial transactions of the Company's servants, although this belief was not very well-founded. But the Court of Directors themselves expressed their conviction "that the Ryots were compelled to sell their rice to monopolising Europeans who could be no other than persons of rank in our service".

In March 1771, Cartier appointed a Comptrolling Committee of Accounts in Calcutta in addition to the Comptrolling Councils of Revenue at Murshedabad and Patna.

Company's direct collection of Revenue.—In the same year, the growing dissatisfaction of the Directors with the *Naib-Dewan* Muhammed Reza Khan came to a head. In their despatch of August 29, 1771, the Directors recorded their censure on the conduct of the *Naib-Dewan*, charging him with corrupt practices and "cornering the grain" during the famine of 1770 and oppressive exactions and defalcations, and dismissed him from the Office of the *Dewan*. It was also stated in the Despatch that the Company should henceforth "stand forth as *Duan* and by the agency of the Company's servants take upon themselves the entire care and management of the revenues".

This proclamation brings to a close the first chapter of English Revenue Administration in Bengal.

Governorship of Hastings.—Warren Hastings succeeded Cartier in 1772. His comment on the condition of the country is worth quoting : "Notwithstanding the loss of at least one third of the inhabitants of the province and the consequent decrease of the cultivation, the nett collections of the year 1771 exceeded even those of 1768." This testifies to the break down of the old Mogul Revenue machinery which kept the revenue of the country up to the standard of a time of plenty even at a time of distress. The result was that the country was ruined. An immediate reform was thus called for in the revenue arrangements. Warren Hastings was appointed with full powers to deal with the situation. "We now arm you with full powers," the

Company expressly wrote, "to make a complete reformation." Unfortunately, Hastings failed to rise to the full height of his responsibilities and applied remedies which only aggravated and were worse than the disease, as will be seen in the developments that followed.

The Company acting as Dewan.—The decision of the Court of Directors to stand forth as Dewan and to take upon themselves the entire care and management of the Revenues is described by James Mill as amounting to a revolution much greater than the change from Hindu to Muslim masters. "It was an innovation by which the whole property of the country and along with it the administration of justice were placed upon a new foundation." The Directors, however, simply directed a total change of the system but left the plan and its execution to the discretion of the local authorities. Warren Hastings found in this want of direction in detail a greater excuse for a wider freedom in action.

Five years' Settlement (1772—1777) : Committee of Circuit.—On May 14, 1772, the Governor and Council resolved that

- (a) The lands were to be let out to Revenue Farmers for the period of five years.
- (b) A Committee of Circuit consisting of the Governors and four members of the Council was to be appointed to visit the principal Districts and form the five years' Settlement.
- (c) The servants of the Company who were already employed in the Districts were now to be called Collectors instead of the old name of Supervisors.
- (d) In each of the Districts a native Officer under the title of Dewan should be employed to inform or check the Collector.

Its Settlements at Krishnagar and Kasimbazar.—Warren Hastings himself proceeded with the Committee of Circuit first to Krishnagore and thence to Kasimbazar. At Krishnagore, the Committee took recourse to a public auction for purposes of settlement with the Farmers on the basis of the highest bids. The Raja or Zemindar of Krishnagore put forward a belated proposal for the farm of the District and it was not accepted.

The Krishnagore Settlement was the key to the plan on which the settlement of the whole province was then intended. It also gave Warren Hastings an occasion to record his views on the rights of Zemindars and Talookdars which formed the subject of momentous debates on the eve of the Permanent Settlement.

Hastings prefers Zemindars.—Hastings points out that there were two methods of dealing with Zemindars and Talookdars, viz.,

- (1) "To let the lands to farm and make the Farmers pay each Zemindar or Talookdar thus displaced a certain allowance or percentage for the subsistence of himself and family."
- (2) "To settle with the Zemindars themselves on the footing of Farmers obliging them to enter into all the conditions of a Farmer's lease."

The first method Hastings does not favour on the ground that it would reduce Zemindars to the position of mere pensioners and efface their claims as proprietors and it would also lead to the passing away of the original Zemindars, which was "neither consistent with our notions of equity nor with the Directors' orders that we do not by any sudden change alter the constitution nor deprive the Zemindars or Talookdars of their ancient privileges and immunities."

Hastings, therefore, supports the second method on the ground "that from a long continuance of the lands in their families, it is to be concluded they have rivetted an authority in the District, acquired an ascendancy over the minds of the ryots, and ingratiated their affections. From continuing the lands under the management of those who have a natural and perpetual interest in their prosperity, solid advantages may be expected to accrue."

Rani Bhavani.—At Kasimbazar, the Committee of Circuit dealt with the Settlement of the Province of Rajshahi. "A Settlement for five years was concluded with Rani Bhavani, the Zemindar of that District, whose substance credit and character rendered the conditions of her offer the more desirable."

The Five years' Settlement formed in 1772 was practically based on two leading principles, viz.,

- (1) That the letting of the revenue in Farm to the persons making voluntary offers was a method of discovering the real value of the lands.
- (2) That a Settlement with the established Zemindars and Talookdars on conditions similar to those settled with the Farmers was preferable to letting the lands to other persons. As Hastings himself points out in his Minute entered on the Proceedings of Council dated April 22, 1775: "In the Five years' Settlement a greater portion of the country was actually farmed to the Zemindars themselves than to other persons."

Over-Assessment under Hastings.—The Settlement of 1772 was marked by progressive balances of unrealised revenue calling for heavy remissions. Hastings, in his Minute on the Proceedings of Council dated March 8, 1775, himself admits this by stating that the "lands were let in general too high, and to find out the real value of the lands, the most probable method was to let them to the highest bidders and also to dispose of the farms by public auction. This proved, however, such a source of competition that lands in general were over-rated. Where this happened, abatements have been allowed." He further admits that under the farming system "the Burdwan province had been greatly improved and its value ascertained", but this plan of "ascertaining the value of other districts" has been "obstructed by a coincidence which could not be foreseen; we mean the farmers having engaged for a higher revenue than the districts could afford." It is to be noted that this farming system ousting the zemindars was not in accordance with the instructions of the Court of Directors that Government "should not by any sudden change alter the constitution or deprive the zemindars, etc., of their ancient privileges and immunities."

English Officers farming through Banians.—The system of Warren Hastings was also assailed by higher authorities on the ground, as stated in a Minute dated September 15, 1775, "that Banians of some of the Company's high Officials were holding revenue Farms on their behalf." The Court of Directors observed: "that in all the abuses already proved the Banian is constantly the ostensible man in whose name the farm or contract is held by his master. We have reason to believe that not less than one third of the Company's lands in these provinces are or have lately been held by the Banians of English gentlemen. The Governor's Banian stands foremost and distinguished by the enormous amount of his farms and contracts." As a matter of fact, W. Makepeace Thackeray (grandfather of the Novelist) actually farmed the revenues of Sylhet under the name of a native agent and was censured for his action by the authorities.

"Cantoo Babu."—Hastings' own Banian "Cantoo Baboo" received a grant of the Pargana of Baharband, which was also adversely criticised. Krishna Chandra Nandy's farms yielded an annual rental of over 13 lacs of rupees, while he held farms also in the name of his son, Loknath Nandy, then a child of 12 years. The Governor-General at the least stands accused of laxity and nepotism in permitting his own Banian to hold such lucrative farms and thus acting contrary to the spirit of the Regulations laid down by his own Committee of Circuit.

"Nundoo Lal".—At the same time, Hastings took another unfortunate step in prosecution of his scheme of Revenue Settlement. He appointed as an *Aumil* "one Nundoo Lal," who was furnished with a guard of 50 Sepoys, to investigate the conditions of the Zemindars. This was condemned by the Court of Directors in the following words: "We confess ourselves alarmed at these proceedings, and more so when we consider that Zemindars and other responsible inhabitants of a country, from which this Company and the nation drew immense advantages, should be liable to vexatious inquisitions and even to the possibility of suffering abuses and grievous oppressions from other natives vested with an authority which we utterly disapproved."

Committee of Revenue.—Besides initiating the five years' Settlement, the Committee of Circuit was responsible for certain other administrative changes. It placed the Revenue Administration under the direct control of a President and a Council who were to form a Committee of Revenue. They also recommended that the Khalsa or Treasury Office should be removed from Murshedabad to Calcutta so as to make Calcutta the official Capital of the province. To Warren Hastings thus belongs the credit of being the builder of Calcutta. He himself made the following prophetic comment on the change: "The seat of government is most effectually and visibly transferred from Murshedabad to Calcutta, which I do not despair of seeing the first city in Asia, if I live." An Indian Officer styled *Rai Raian* was appointed to audit the accounts of the *Dewani* of the whole province and control all the provincial *Dewans* attached to the various collectorships. The salary of this post was

Rs. 5,000 a month. The first holder was Raja Raj Ballabh, a son of Raja Rai Durlabh, an old colleague of Muhammad Reza Khan.

In October 1772, the new Committee of Revenue began its work by settling the Revenue at Hughli, Midnapore, Birbhum, Jessore and the Calcutta Zemindary lands. The Settlement was of course for five years, and lands were farmed out by public auction with the intention of discovering their real value. As has been already pointed out, this method of farming only introduced a body of speculators and placed both the Zemindars and Ryots at their mercy, severing an old established link between Government and the cultivators of the soil.

Thus between 1772-1781 the old connection between Zemindars and their tenants was seriously impaired by this unfortunate method.

The British Collectors soon realised in the Districts that the Settlements had been seriously over-estimated. But the Board refused to believe in their Districts Officers and added to the trouble by peremptory orders for the collection of deficits. The orders were carried out with much harshness, even up to the limit of imprisoning Zemindars and Farmers (thus adding to the confusion). At the same time, the Collectors were unable to get at the real facts regarding the rents paid by the cultivators.

PERIOD II (1773—1781) : CENTRALISATION

Recall of Collectors.—In April 1773, the Court of Directors ordered the recall of the Collectors from their Districts and adoption of other measures for collecting the Revenues, resembling the orders issued in 1769 by which Supervisors were abolished. The new measures involved :

- (1) A Committee of Revenue at the Presidency to be assisted by the *Rai Raian*.
- (2) Provincial Councils of Revenue at five centres, Calcutta, Murshidabad, Burdwan, Dinajpur and Dacca.
- (3) The original District or Collectorship to be under the control of an Indian Dewan.
- (4) Collectors to make up their accounts and hand over charge to Indian Deputies.

These changes made the situation worse. The employment of Indian Dewans replacing European Collectors only deprived the European servants of the Company of a direct knowledge of the state of Revenue and methods of collections.

Widespread Distress.—The proceedings of the Board of Revenue from 1773 to 1776 tell a story of large deficits, defaulting Zemindars, absconding Farmers and deserting Ryots. Like the previous Collectors, the Provincial Councils began to report that the country was over-assessed. The Council of Patna sent in a moving description of the distress in that province in January 1773 and definitely recommended a settlement in perpetuity because no satisfactory collections could be made except on that basis of stability which only a lengthy tenure furnishes.

First suggestion of Permanent Settlement.—Middleton, the President of the Provincial Council at Murshidabad, reporting on the general distress stated that its first cause was the famine of 1770 together with the "inevitable arbitrary settlement made by the Committee of Circuit and the public auction of Farms". He also suggested "a universal remission of a suitable amount of revenue" and future Settlement to be made with Zemindars. P. M. Dacres, who was lately Chief of the Calcutta Committee, also considered the public auction of Farms to be largely responsible for the distress, instancing the bidding in the Nadia District. He also advocated remission of deficits and a Permanent Settlement with Zemindars which "would fix the rents in perpetuity and trust to a sale of their property as a security for their payments". The same view was also expressed by several high Officers of the Company like G. Hurst of the Council of Patna, G. Vansittart who was Chief of the Burdwan Council and G. G. Ducarel who was lately in charge of the Purnea District in 1775.

Plans of Settlement issued by Hastings and Barwell and by Francis.—

On 21st March 1775, the Governor-General formally asked the opinions of individual members of the Council on the subject of Settlement and collection of land revenue. On 22nd April, he and Barwell submitted a joint plan in which they practically adopted the principle of a Permanent Settlement by recommending leases for life or for two joint lives, with preference for Zemindars as such lessees, and further providing that when a Zemindar does not farm his own Zemindari, he be entitled to an allowance of 10 per cent. of the revenue settled by the Government. Francis, however, on 22nd January 1776 recommended a Settlement in perpetuity with the Zemindars. Francis published his proposals in 1782. His violent advocacy of the claims of Zemindars only brought into prominence the other view regarding the ownership of the land, viz., that the sovereign was the proprietor of the land and not the Zemindar.

The controversy between Hastings and Francis is interesting. Francis's charge against Hastings is that he was out "to annihilate that rank of men in whom the inheritance and property of the lands of Bengal are vested". He also held that "the Government cannot descend to the ryot" and the purpose of the inquiries into the valuation of lands as proposed by Hastings was simply "to extract from the people the utmost they can pay". A Government "which claims and exercises a right of arbitrary taxation, and whose professed object is to exact the greatest possible revenue from the country, cannot afford to preach tenderness to the cultivator". Hastings's plea of protecting the cultivator against the Zemindar was answered by Francis by pointing out that it was the natural interest of the Zemindar to conciliate the cultivator in those days when land was awaiting the cultivator. "I have heard it asserted", he writes, "that formerly, when a ryot quitted any Zemindar's lands, he (the Zemindar) followed him, and used every motive of persuasion to prevail on him to return; and that the Zemindars were accustomed to bribe away each other's tenants." It may, however, be

stated for Hastings that his plan made jointly with Barwell fully recognised the need of forming settlements, wherever possible, with the Zemindars and making these settlements for pretty long periods, as we have already seen. Hastings was also conscious of the rights of the ryots in those days when he writes ; "while the ryot pays his rent, the Zemindar has no right to dispossess him ; nor can the Zemindar, by any legal right, exact a higher rent from him than his pottah prescribes." In the end, however, it was the volume of Minutes of Philip Francis which materially influenced the final revenue policy as settled by Pitt's India Act of 1784. As observed by James Mill (*History*, V. 332), "Francis's plan of finance was adopted with blind enthusiasm, with a sort of mechanical and irresistible impulse." Thus Francis ranks as the first promoter of the Permanent Settlement.

The Amini Commission.—In the meanwhile, the Quinquennial Settlement was about to expire. In August 1776, Hastings proposed to the Board that all Provincial Councils and Collectors should submit an estimate of the Land Revenue that might justly be expected from their Districts. A circular to that effect was also issued. On 1st November 1776 the Governor-General appointed a Commission known as the *Amini Commission*, consisting of D. Anderson, C. Bogle and C. Croftes. The Report of this Amini Commission is the most valuable Document in the early Revenue History of Bengal under the Company.

Annual Settlement.—The Court of Directors expressed their surprise that "after more than seven years' investigation" a further Commission of Enquiry was needed to collect the information about the rental of Ryots. Tired of further investigations, they sent orders on 23rd December 1778 for the Land Revenue to be settled annually.

The Provincial Councils were empowered to make fresh Settlements with Zemindars who were now invited to co-operate in making the Settlement.

PERIOD III (1781—1786) : FURTHER CENTRALISATION.

Committee of Revenue, 1781.—In 1781, "a permanent plan for the Administration of Revenue of Bengal and Behar was issued by the Governor-General-in-Council in their Revenue Department." By the Plan, the Provincial Councils were abolished, and Revenue Administration was centralised under a Committee at Calcutta called the Committee of Revenue. Ganga Govind Singh was appointed Dewan and Shore was a Member of the Committee. Collectors and Kanungos were reinstated in the Districts.

Continued distress.—This plan was foredoomed to failure because it was wrongly based on centralisation and concentration and did not give scope to Company's Officers collecting local knowledge of Revenue. Besides, the new Collectors were merely figureheads with no power given in the new Settlement of Revenue.

Reports of Collectors.—The situation in the country is graphically des-

1783 : "There is nothing but confusion ; there is no Kanungo to be found, *he is fled the country* ; the Ryots wanting to withhold their payments ; the Farmer seizing everything he can lay his hands upon, and *swelling up his demands* by every artifice ; no pains shall be spared on my part to get at the truth although it is wading through a sea of chicanery on both sides." On 13th March same year, William Rooke, Collector of Purnea, reported in the same strain : "The Farmer has repeatedly flogged those who preferred any complaint to me. In the course of the last ten days a numerous body of Ryots from all quarters have besieged me on every side, clamouring for justice. Their complaints exhibit an almost universal disregard and setting aside of their Pottahs, an enormous increase exacted from them, etc.". In his Minute of 1782, Shore also ruthlessly exposed the unsoundness of the whole scheme. He stated: "I venture to pronounce that the real state of the Districts is now less known and the Revenues less understood than in 1776. It is the business of all from the Ryot to the Dewan to conceal and deceive. With respect to the Committee of Revenue, it is morally impossible for them to execute the business they are entrusted with."

The picture, however, is not entirely black. In 1782 an Office known as the Zemindary Daftar was established for the management of the estates of minor and female Zemindars. This anticipates the present Court of Wards. The Committee of Revenue in 1783 issued orders that the District Officers should proceed on tour through their Districts for gaining knowledge about the state of the crops for the year. These tours were previously not allowed. The change is due to the influence on administration of men like Anderson, Shore, and Charters, all of whom had *mufussil* training. The system that placed Secretariat theories and centralisation before district and local experience was slowly passing away.

Parliamentary intervention.—In the meanwhile, the increasing complications of the situation in Bengal had the effect of drawing the attention of the home government to Company's affairs. The period 1772-1786 is marked by the first interference of Parliament in the work of the Company which became the subject of investigation at the hands of parliamentary commissions, the Select and Secret Committees of 1772 and the Select and Secret Committees of 1781. Each time the investigations centered round a great personality. In 1772, it was Clive, and in 1781, Warren Hastings. The situation created by Clive was met by the Regulating Act of 1773 : that created by Hastings called for Pitt's Act of 1784. Cobbett, writing in 1768 in his *Parliamentary History*, states : "The affairs of the East India Company were now become as much an object of annual consideration (in Parliament) as the raising of supplies" (XVI. 402). Indeed, the feeling against the Company in England in authoritative circles rose very high. Horace Walpole stated : "Such a scene of tyranny and plunder has been opened up as makes one shudder." Even Chatham burst out (in 1773) : "India teems with iniquities so rank as to smell to earth and heaven" (*Correspondence of Chatham*, IV, 276). First, Fox brought forward two India Bills in 1783. He cried : "The Indian

people, in spite of every exertion both of the Legislature and Court of Directors, groan under the scourge, the extortion, and the massacre of a cruel and desperate man (Warren Hastings) whom in my conscience and from my heart, I detest and execrate" (*Parliamentary History*, XXIV, 221). Burke burst forth: "The Company's government was one of the most corrupt and destructive tyrannies that probably ever existed in the world" (*Ib.* XXIII, 1336). And in referring to the Company's servants of the period, his impassioned eloquence found no limits in describing how "animated with all the avarice of age, and all the impetuosity of youth, they roll in one after another; wave after wave; and there is nothing before the eyes of the natives but an endless, hopeless prospect of new flights of birds of prey and passage, with appetites continually renewing for a food that is continually wasting... Their prey is lodged in England; and the cries of India are given to seas and winds, to be blown about in every breaking-up of the monsoon, over a remote and unhearing ocean" (*Ib.* 1333-4).

"It is the fashion to discount such a passage as mere rhetoric and prejudice, but to prove the large residuum of truth behind the burning words, we need only cite the evidence of Warren Hastings himself. In the first year of his Governor-Generalship, he wrote: "Will you believe that the *boys* of the Service are the sovereigns of the country, under the unmeaning title of *Super-visors*, collectors of the revenue, administrators of justice, and rulers, heavy rulers, of the people?" (*Cambridge History of India*, V. 198).

And yet the gravamen of all these charges against the Company was that the Company had been trying to deal directly with the cultivators so as to appropriate all the rent or revenue which was being intercepted for centuries by the indigenous intermediaries, the Zemindars, whose supersession only opened the door to more rack-renting of the cultivators and upset the entire social order.

Pitt's Act of 1784.—The reaction to the system of Warren Hastings based on ruthless farming of revenue reached its climax in Pitt's India Act of 1784 which was passed in place of Fox's Bills. Section 39 of the Act sums up the situation in the following Preamble: "Whereas complaints have prevailed that divers Rajas, Zemindars, Polygars, Talookdars, and other native landholders within the British territories in India, have been unjustly deprived of, or compelled to abandon and relinquish, their respective lands, jurisdictions, rights and privileges, or that the tributes, rents, and services required to be by them paid or performed for their respective possessions to the said Company, are become grievous and oppressive." The Act directed that "such complaints should be forthwith and fully investigated" and steps taken "for effectually redressing all injuries and wrongs which the said Rajas, Zemindars, Polygars, Talookdars, and other native Landlords may have sustained unjustly" and "for settling and establishing the permanent rules by which their respective tributes, rents, and services shall in future be rendered and paid to the said Company, by the said Rajahs, Zemindars, Polygars, Talookdars, and other native Landholders."

Summary of Changes.—We may here summarise the various changes made in the Revenue Administration of Bengal between 1765-1786.

Up to 1769 the Company simply functioned as Dewan, retaining the indigenous agency and machinery for collection of revenue.

In 1769 the Company's Supreme Council set up an Executive Committee called the *Select Committee* to control revenue and other matters. The *Select Committee* appointed a Resident at the Darbar at Murshedabad and European Supervisors to work in the Districts under the control of the Resident. Muhammed Reza Khan was retained as *Naib-Dewan*.

In 1770 was constituted the Comptrolling Council of Revenue at Murshedabad with Richard Becher as its Chief and three other members.

In 1771 Collectors were appointed in place of Supervisors while the *Naib-Dewans* were dismissed.

In 1772 the *Select Committee* under Hastings as President appointed a Committee of Circuit to tour the Districts for the collection of local revenue data as the basis of a new settlement.

The Supreme Council also set up a separate Board of Revenue which was called the *Committee of Revenue*.

This *Committee of Revenue* functioned up to 1781 when it was re-organised and composed of members who were not members of the Supreme Council but only junior and subordinate to them. This reformed Committee still retained its name as *Committee of Revenue*. The earlier Committee of Revenue is loosely referred to as Board of Revenue by contemporary writers up to 1781 and this sometimes creates confusion.

In June 1786, the Committee of Revenue was reconstituted under the designation of the Board of Revenue which continues to this day.

To put the changes in another way, during the twenty years from the grant of the Dewani in 1765, all possible methods of Land Revenue Administration had been evolved and tried by the Company by turns :

Native Agents in the Districts under a mixed British and native control at Murshedabad ;

British Supervisors in the Districts under a British control at Calcutta ;

Native Agents or Amils in the Districts under the control of six British Agency Councils ;

And, finally, a British Agency of Collectors in the Districts under the central control of a British Board of Revenue in Calcutta.

The same variety of methods also applied to the period for which lands were to be leased out. Letting by public auction had been tried. Yearly Settlements had been tried, then a Settlement of five years ; then yearly Settlements again, with an inclination on the part of the District Officers for leases for a period of years, in spite of orders of the Government to the contrary ;

then strict injunction to grant leases for one year only; then, in terms of Pitt's India Act of 1784, the instructions of Parliament to the Company to make "Permanent Rules;" and, finally, the decision of the Court of Directors in favour of long leases, followed by its orders for a Ten Years' Settlement with a view to its conversion into a Permanent Settlement at the end of that term. It may be finally observed that Lord Cornwallis came out to India as the heir of the results of these twenty years' varied experiments in rural administration. In regard to both the questions concerning Administration and Settlement, conclusions had thus been gathered and worked out with great pains amid failures, warm controversies and a divergence of steps to left and to right that sometimes seem to lead to nothing (W. W. HUNTER IN "BENGAL MANUSCRIPT RECORDS," Volume I, pages 23-24).

PERIOD IV (1786—1793) : DECENTRALISATION.

Reforms under Governor Macpherson.—This period was ushered in by Pitt's India Act of 1784. Warren Hastings resigned his Governorship on 8th February 1785 and delivered over charge to Macpherson. It may be said to the credit of Warren Hastings that although he failed to evolve a sound system of Revenue Administration he had the statesmanlike insight to select the men who could be trusted to make Revenue Administration a success. Conspicuous amongst these were Shore, David Anderson, Samuel Charters, Charles Croftes, and James Grant. Some reforms were at once made in land revenue administration. They were based upon a scheme of complete decentralisation. The Committee of Revenue at headquarters was to retain only a general power of supervision and sanction. The native Dewans were abolished, and the Kanungo was revived. Under a re-organised scheme, the Department of Kanungo was overhauled under a Chief Officer, called the Serishtadar, who was to be the keeper of Land Revenue records. By a curious irony of fate, James Grant was appointed the first Serishtadar and was thus entrusted with the task of working a system which was being based upon the revival of the Zemindars in which he had himself not much faith.

District Collectorships.—The basis of the system is the formation of Districts or Collectorships. Formerly, the units of Revenue Administration, the fiscal divisions, like Pargannas or Zemindaries, were not defined areas. The earlier Supervisors, the Provincial Councils, or the Collectors, appearing in Revenue Administration from time to time since 1772, had not also their authority precisely defined over these fiscal divisions. The result was that Pargannas and other fiscal divisions became disintegrated in course of time and scattered. For instance, the Collector of Murshidabad of the earlier eighties had under his jurisdiction estates in Dacca which was at a distance of 278 miles by river at that time (as shown in MAJOR RENNELL'S famous "BENGAL ATLAS" in its Edition of 1781).

These new Districts numbered 35 with a Revenue return of Rs. 8 lacs of rupees for each.

In accordance, however, with Shore's "MINUTE OF 13TH MARCH 1787", the number of these Districts was reduced to 23 to make them more compact and economical. The Collector was now installed as the responsible Administrator of his District to whom the Zemindars must look for fair assessment of revenue, and the Committee of Revenue for full collection of the revenue assessed. The Kanungo's office was also reformed and maintained as an Office of information and registry for the Collectors, above the influence of Zemindars.

Board of Revenue.—As we have already seen, on June 12, 1786, the old Committee of Revenue was dissolved and reconstituted as the Board of Revenue, whose duty was to sanction the Settlements made by the Collectors, subject, of course, to the general control of the Supreme Council.

The reforms of 1786 paved the way of the Permanent Settlement. These reforms were evolved by Shore whose Minutes furnish the actual details of the later Decennial and Permanent Settlements.

Governorship of Lord Cornwallis, 1786 : Instructions of the Court of Directors.—On September 12, 1786, Lord Cornwallis landed in Calcutta bringing with him a letter of instructions from the Court of Directors, dated 12th April 1786, a lengthy document of 89 paragraphs. The Directors deprecated the "disposition to innovation and experiment" and preferred a "steady adherence to one principle to frequent changes." "They censured the ineffectual attempts that had been made to increase the assessment of revenue, whereby the Zemindars had been taxed to make room for the introduction of farmers, sezwuls, and aumeens (collectors of revenue) who, having no permanent interest in the lands, had drained the country of its resources." They considered "a Permanent Settlement of a reasonable and fair revenue to be the best, for the payment of which the hereditary tenure of the possessor is to be the only necessary security." They also pointed out that "the frequency of changes had created such distrust in the minds of the people as to render the idea of some definite term more pleasing to them than a dubious perpetuity." They, therefore, directed the assessment for a period of ten years in the first instance, with an understanding that "the assessment now fixed would afterwards be considered as the permanent and the unalterable revenue so that no discretion can be exercised by their servants abroad in any case." As regards the amount of such assessment, the Directors analysed the collections for the twelve years from 1772, the average for the period being Rs. 253 lacs in round figure. They, however, did not definitely state whether this should be finally counted as the permanent revenue for the proposed settlement. The Governor-General was also directed "to report on all Zemindars, Talookdars and other landholders who were dispossessed of their lands since the Company's accession to the Dewani and to enquire into the relative rights and privileges of the different classes and grades of landholders and their respective liabilities for rents, tributes, and services to the State" and also to the circumstances under which the rents or tributes demanded were "grievous

and oppressive and contrary to the custom and constitution of the ancient Mogul Government." When the tribute of each Zemindary was thus ascertained, "the proprietor was to be left in the undisturbed administration and enjoyment of his estate and to have the strongest assurances that so long as he pays his stipulated revenue, he shall be subject to no local scrutinies or interruptions of the officers of Government, unless where regular judicial process may become necessary to adjust disputed claims between him and his tenants and other persons." The Directors finally expressed their hope that "the mode which they directed the Governor-General to pursue for the purpose of settling a Permanent Revenue for each Zemindar either in perpetuity or for a long term of years and give him the uninterrupted management of his lands will prove extremely satisfactory to the landholders in general and far more so than any enquiries into the value of produce of the lands."

Further Inquiries.—The Court of Directors thought that the basis for this new Settlement was already available in the material gathered by investigations which had been carried on from 1765 onwards. Lord Cornwallis, however, soon found out that such basis was not yet available and called for further investigations on the basis of the scheme proposed by Shore. In the meanwhile, it was decided that for the years 1787 and 1788, the Collectors should make annual Settlements of the Revenue, besides engaging themselves in the investigations which the Governor-General had in view. At last, at the close of the year 1789, and the beginning of 1790, Decennial Settlements of Bihar and Bengal were decided upon and regulations issued in accordance with this decision.

Controversy.—These regulations were, however, preceded by much discussion and controversy in which the principal parts were taken by James Grant, Sir John Shore and Lord Cornwallis. The controversy between Grant and Shore had the effect of clearing the path considerably for the final scheme of a Settlement.

Grant's Views.—Grant expressed his views in three Documents, viz.,—

- (1) "POLITICAL SURVEY OF THE NORTHERN CIRCARS" published on December 20, 1784 and forming Appendix XIII of the Fifth Report,
- (2) "ANALYSIS OF THE FINANCES OF BENGAL" issued on April 27, 1786, and
- (3) "THE HISTORICAL AND COMPARATIVE VIEW OF THE REVENUES OF BENGAL" issued on February 28, 1788.

The Zemindar a mere official.—In the first work, Grant takes up the position that the Zemindar was merely a temporary Official and had no right of property in land which vested absolutely in the State. It is somewhat strange that his interpretation of the Zemindar's status was adopted by the Committee of Revenue in 1786 in spite of the opinion to the contrary expressed in the

Regulating Act of 1784. The Committee of Revenue, went so far as to describe the Zemindar as being a mere official of the Government working under certain conditions and issue instructions to stop sale of "lands which in our opinion belong to Government" for arrears of Revenue. The Committee of Revenue was, however, replaced in the same year by the Board of Revenue who at once revoked the policy of the expiring Committee, and in a Minute written on April 2, 1788, Shore as a Member of the Board completely opposed Grant's view. He expressly wrote: "The rents belong to the Sovereign, the lands to the Zemindar."

Trend of Opinion.—In the meanwhile, practical experience of Land Revenue Administration was slowly solving the controversy in a particular direction. The results of the Quinquennial Settlements (1772—1777) gave the quietus to the Farming system. The Zemindary system was favoured, each in his own way, by Barwell, Francis, and Warren Hastings, and their views were confirmed by the orders of the Court of Directors of December 24, 1776, as we have already seen. The other alternative that Government should deal directly with the Ryots or Cultivators was found by the Company to be quite impracticable in those days. It is thus an irony of fate that when Grant was writing his treaties against it, a Settlement with the Zemindars had already been decided on by the authorities and that he was himself appointed as Serishtadar to take charge of the working of the Zemindary system in which he did not believe in theory.

Assessment and Leakage of Revenue.—Another point of difference between Grant and Shore is that while Grant was trying to prove that Bengal was greatly under-assessed, Shore's contention was that the Assessment was as high as it could be in the then circumstances.

In his third work, Grant's case is that a good deal of defalcations had been going on in the Company's Revenue under Muhammed Reza Khan. In his second work, he tries to justify the amount of Assessment as it prevailed in the last half century of Mogul control. His further implication is that while in fact the full assessment of Mogul times was being realised, the Company was able to secure a small portion of it owing to the leakage of Revenue among the indigenous Revenue agents. Grant also works out figures for the Mogul Assessment, the extent of its realisation and the leakage of Revenue to the Company. His figures for Mogul Assessments are based on 20 Volumes of Persian Accounts which he "procured through the influence of a light and private purse" (Fifth Report, page 252) and handed to "an English gentleman high in office" (supposed to be Philip Francis) in 1776 by the Agents of his Sadar Kanungos (*ib.* page 280). Grant, however, did not produce these Books of account to justify his figures. Grant's figures, also, are somewhat doubtful for the period immediately before the grant of the Dewani, and also for the period subsequent to Kasim Ali Khan in whose time papers of Revenue Accounts were reputed to have been lost or destroyed. Accordingly, Grant's figures for these years are little more than suppositions to support these theories.

Another weak point of Grant's case is his attempt to show that the Assessment in the Mogul period was always being realised. He charges Muhammad Reza Khan with defalcations amounting to Rs. 2 crores 40 lacs. It is, however, forgotten that in 1772 Reza Khan was charged by Warren Hastings with embezzlement and subsequently acquitted and that in 1788 his indebtedness to the Banker Jagat Set amounted to Rs. 3 lacs, which is highly improbable for a man who is supposed to have embezzled so much money.

Another doubtful point in Grant's position is that he believes without proving that even when there was lower Assessment after the grant of the Dewani, the actual collections of the Revenue Agents corresponded to the figures of Mogul Assessment. It should be remembered, however, that there could not be much leakage of Revenue when the Quinquennial Settlement was made locally by the Committee of Revenue itself and not by the Local Officials whether Supervisors or Collectors, who had no control over it up to the year 1786. Besides, the Revenue demand of the Quinquennial Settlement was itself too high to give scope to any extra gain at the time of collection. The Committee also very closely examined the account of arrears up to their source, so that the collecting agency could not have any share in them.

Grant's Statistics.—Grant's work is of value for its statistical calculations. He estimates the total area of Bengal at 90,000 square miles of which $\frac{1}{4}$ th he estimates to be covered by hill and jungle, another $\frac{5}{8}$ th by water, roads and towns, $\frac{2}{8}$ ths as common pasturage and $\frac{1}{8}$ th only under cultivation. Lord Cornwallis on the basis of investigations initiated by him estimated the area under jungle to be capable of cultivation at more than $\frac{1}{3}$ rd of the total area. Grant's estimate that the value of the gross produce of 1 bigha of land was Rs. 6 is too high, considering that the price of rice at that time averaged two maunds in a rupee. A bigha could not be taken to produce on an average 12 maunds.

Basis of Assessment.—Grant's main position is that Settlements should be made of the Dewani lands at the full assets of the year 1765 as given by him on the basis of the highest Mogul Assessment. His proposal is not consistent with his own principle that the revenue should be assessed in proportion to the produce of the lands of which it should be $\frac{1}{4}$. It is difficult to understand on what grounds he adopts the Assessment of 1765 as the basis for the ensuing Settlement. The assessment of 1765 was not based upon any detailed Hastobud or assessment after detailed measurement. He himself knew that such an Hastobud was impracticable at that time. In a way, his opposition thus leads to the conclusion that the Company's knowledge of Revenue Administration was not at the time sufficient to justify a Permanent Settlement of the Land Revenue which was also the conclusion which his opponent Shore had reached by a different line of approach.

Grant's fallacy.—The fundamental fallacy of Grant was to assume that Todar Mal's assessment of Bengal represented the actual realisable Government demand. As Moreland points out (MORELAND'S "AGRICULTURAL SYSTEM OF THE MUGHALS", pages 196-198), it represented only a summary

valuation of a newly-conquered province where a detailed assessment was impossible at that time. As stated in the *Ain* itself, Akbar maintained for Bengal the method of assessment which he found already in force there, the method of *Nasaq* or lump assessment. Confusing ideal assessment or valuation with actual demand, Grant missed the meaning of deficits which he attributed to the leakage of revenue at the hands of its collectors, the *Zemin-dars*, revenue agents, and intermediaries of those days. He wanted to make Kasim Ali's assessment of 247 lacs of 1762 the basis of the Company's assessment without considering that of that demand only 65 lacs were realised in 1763, 77 in 1764 (under Nanda Kumar), 82 in 1765, and 147 in 1766 (under Reza Khan). Similarly, large gaps between demand and collection also marked subsequent years under the Company's *Dewani*. The collections amounted only to 153 lacs in 1769, 131 in 1770, 140 in 1771 and 153 in 1772.

Policy and basis of the assessment.—The underlying policy of the assessment which the Company had in view of course was to get out of the country the maximum amount of revenue possible in those days. The Committee of Circuit in their Minutes, dated July 28th, 1772, made it quite clear in their statement: "The revenue is beyond all question the first object of Government, that on which all the rest depends, and to which everything should be made subsidiary". Therefore, the Company's first concern was to discover the traditional basis of assessment or the original amount of revenue that was fixed by Todar Mal's Assessment of Bengal in 1582 in the time of Akbar. That assessment was known as the *Asal Jama*, the Fixed Settlement that had been handed down through centuries. It was this traditional settlement that confronted the Committee of Circuit as the ground work of their attempted new valuation. The Company, therefore, had to study the course of this assessment, since Akbar's time and the ways and means of obtaining increase in revenue. Grant gives figures for it in the FIFTH REPORT.

History of Settlement from Akbar : Settlement of Todar Mal.—The course of this assessment may be thus indicated. In the first Mogul Settlement of Raja Todar Mal in 1582, Bengal proper consisted of 19 Sarkars divided into 682 Parganas. A Pargana was administered by a *Chaudhuri* or Zamindar, subject to the control of a *Kanungo* who was responsible for the Pargana accounts, kept the rates of assessment, controlled the survey of the Pargana, and was a custodian of the cultivator's rights. Corresponding to the *Kanungo* there was a *Patwari* for each village.

The Original Royal Revenue Roll is thus stated in the FIFTH REPORT :—

	Rs.
Khalsa Lands	63,44,260
Jaagir Lands	43,48,892
Total Revenue of Bengal ..	<u>1,06,93,152</u>

Khalsa lands comprised territories which paid revenue direct into Royal Treasury or *Khalsa Serishtā*. *Jaigir* Lands comprised territories for which the Revenue was assigned in return for service to the State.

Settlement of Shuja, 1658.—The second Mogul Settlement was made in the year 1658 by Shah Shuja, the Viceroy of Bengal. By this Settlement, 361 additional Parganas were formed over and above the original 682 Parganas. There were additions of territory. Six *Sarkars* of 38 Parganas were transferred from the Subah Orissa to Bengal. Five *Sarkars* of 256 Parganas were created out of annexations in Assam. The annexation of Tipperah meant the addition of two *Sarkars* comprising six Parganas. The tribute paid by the Bishnupur Chief was reckoned as one *Sarkar* and five Parganas. The total number of *Sarkars* and Parganas therefore now amounted to 34 and 1,350 respectively.

The Revenue Roll now showed a consequent increase as indicated below:—

	Rs.
Asl (auzil) or original <i>Khalsa</i> lands ..	63,44,260
Izafa or increase on above ..	9,87,162
Annexations by transfer and conquest ..	14,35,593
<i>Jaigir</i> Lands ..	43,48,892
Total Revenue of Bengal ..	<u>1,31,15,907</u>

Settlement of Murshid Quli Khan, 1722.—The third Mogul Settlement was that made by the Viceroy, Murshid Quli Khan, and completed by A. D. 1722. This Settlement created a new administrative division called the *Chakla*. The Parganas were redistributed in thirteen *Chaklas* in place of the thirty-four *Sarkars* of Shah Shuja's Settlements. Each *Chakla* was under an *Amin*. The *Chakla* was more an administrative than a fiscal unit. It formed the basis of the later British division of the Province into districts. The creation of an enlarged administrative division termed *Chakla* was due to the need for giving the Zemindar full scope for the discharge of his many administrative duties entrusted to him in addition to those of collecting rents and paying revenue.

The Revenue Roll of Murshid Quli Khan, termed *Jama Kamil Tumari* or complete Revenue Roll stood as follows:—

	Rs.
<i>Khalsa</i> Lands according to Shah Shuja's Settlement ..	87,67,015
Increase on above ..	11,72,279
Transfer from <i>Jaigir</i> to <i>Khalsa</i> ..	10,21,415
<i>Jaigir</i> ..	33,27,477
Total ..	<u>1,42,88,186</u>

Resumptions.—It will appear from the above Settlement of Murshid Quli Khan that he made a large addition to revenue by cancelling the assignments of Jaigirs and resuming them as Khalsa lands without paying any regard to the rights of Proprietors and Zemindars. His second reform was to divide the entire Khalsa area into 25 collecting divisions called *Ihitiman* or Zemindaries and *Mazkuri* or small scattered estates for which he made fresh settlements without recognising the Zemindars of those localities.

Settlement of Shuja-ud-din, 1725 : Inroads on Zemindars.—The next important landmark in the history of Settlement is that of Shuja-ud-din Khan who became *Nazim* in 1725. His Settlement is based on a new principle, viz., the capacity of the Landlord to pay and not the capacity of the Tenant or a proportion of the produce and the capacity of the soil. The consequence of this principle was substantial increase of revenue by means of resumptions and additional imposts known as *Abwabs*. The theory of this *Abwab* was that the Zemindars were making large additional profits, legal, or illegal, from the Cultivator, in which the State had no share. It was Murshid Quli Khan in fact who first introduced the system of exactions by *Abwabs*. The *Abwab* again was divided into three heads of *Abwab*, *Kaifiyat*, which was an increase on the previous collections, and *Taufir* which was the resumption of a concealed surplus. An Account of these *Abwabs* is given below :—

	Rs.
Abwabs imposed by Murshid Quli Khan (1722—1725), Shuja-uddin Khan (1725—1739), and Aliverdi Khan (1740—1756)	42,23,467
Kaifiyat mainly imposed by Kasim Ali Khan (1756—1763)	45,23,563
Taufir imposed by Kasim Ali Khan (1756-1763)	31,62,358
Total Abwabs	1,19,09,388

These imposts had the effect of increasing the land revenue demand of Bengal from Rs. 1,42,48,186 in 1722 to Rs. 2,56,24,223.

Abwabs : "Secreted" Lands.—The working of the system of *Abwabs* may be thus described. The *Abwab* generally was imposed on the Asal Jama to the extent of about 1 anna or so extra in the rupee. Up to 1739, the *Abwabs* were not felt to be a burden, because the excess was covered by the increase in the value of land. After 1739, at the time of Nawab Ali-Verdi Khan, who succeeded Shuja-ud-din Khan, these *Abwabs* assumed their

sinister significance. First, the Central Government imposed the *Abwabs* by guess work and not by any actual measurement of the land revealing any extension of cultivation to justify the additional impost. The Zemindar naturally distributed this additional impost with increased profit to himself among the minor Revenue Agents such as *Talukdars*, or *Chaudhuris*, and they in turn realised, with profit to themselves, "the excess" from the Ryots. Therefore, the burden of *Abwabs* fell in the last resort upon the unfortunate Ryot. The question is, how he could find the money to pay it. The answer lies in the simple fact that a great deal more land was brought into cultivation since the *Asal Zama* had been fixed. This extra land which was not recorded and assessed is described as "Secreted Land" in the Board of Revenue Minutes. It was the produce of these "secreted" lands which really helped the cultivator to pay the gradually increasing demands. There was, however, a limit to the extension of cultivation and these "secreted" and waste lands. By the time of Mir Jafar, cultivators were unable to bear these excesses and *Abwabs*, and the greatest distress fell on the Revenue Agent and the Ryot alike. The lot of the Ryot after 1740 was one of increasing insolvency. It did not improve even with the Permanent Settlement of 1793. What added to the distress of the Ryots was that the *Abwabs* were indiscriminately levied at different periods by the Government, Zemindars, Farmers, and even by the inferior Collectors. For instance, "Zemindars and Farmers levied arbitrary duties upon all goods and necessities of life passing by water through the interior part of the country. There were also fines imposed for petty crimes and misdemeanours. These were called *Baza Jama*. Even there was a tax levied upon marriage called *Haldari*."

Plan of Nawabi Assessment.—It was left to the genius of Murshid Quli Khan to invent a new method of settlement known as *Hastabood*. It was to ascertain what rents the zemindars realised from the ryots and capture for the State the entire amount of these rents, after allowing costs and profits of collection. The profits included only those from extension or improvement of cultivation. Kasim Ali Khan carried this *Hastabood* Settlement to perfection by investigating the assets of several districts such as Birbhum, Dinajpur, Rangpur, Purnea, Rajshahi; Dacca, and Chittagong, and then fixing his Land Revenue demand at the huge figure of 256 lacs. It practically captured the entire ryoti rental, leaving the least margin to zemindars. It even assumed rents which the ryots could not always pay. The Dinajpur zemindary had to face the desertions of ryots unable to pay excessive rents. Francis describes Kasim Ali's principle to be that "Whatever the ryots paid should be the property of Government, thereby totally excluding the zemindars." Only the zemindars who were dispossessed of their lands being farmed out or held *Khas* received an allowance which even Jaffar Khan (Murshid Quli Khan) used to grant as "the *Malikana* due to right of proprietorship, furnishing the subsistence of a zemindar. He received his *Malikana* from the *aumil* or farmer?" [Roy Royan's Answer to Question 50 in Harrington's *Analysis*, III, 244].

Review of the situation in the Fifth Report.—The *Fifth Report* contains what may be considered as the most impartial and accurate account of the complicated land problems that confronted the Company, the controversies they created, the solutions proposed by the two exponents of the controversy, James Grant and Sir John Shore, and the circumstances that led up to the Permanent Settlement. A summary of this account is given below in the words of the Fifth Report itself as far as possible as being most helpful to this historical treatment.

Interrogatories of Cornwallis.—The Fifth Report points out that when Lord Cornwallis arrived as Governor-General, Government found it was not yet in possession of information sufficient for a settlement of land-revenue, for a period of 10 years with a view to its perpetuity. Cornwallis, therefore, continued annual settlements as the best expedient for the time being and issued Interrogatories to the experienced Civil Servants for information required.

The famous Minutes of Grant and Shore were the outcome of these Interrogatories.

Cultivable Wastes.—The Fifth Report furnishes the valuable information that the cultivable wastes of Bengal were estimated at $\frac{1}{3}$ of its total area by Cornwallis, at $\frac{1}{2}$ by others and at $\frac{2}{3}$ by some.

Shares of Produce.—We are further told that the cultivator had $\frac{2}{3}$ and Government $\frac{1}{3}$ of the gross produce of land. Of this $\frac{2}{3}$, the Zemindars got $\frac{1}{10}$ = $\frac{3}{50}$ of whole produce together with *Nauncaw* or grants of land for their subsistence. Shares of produce were also given to the *Mokuddim* (head cultivator of the village), *Pausban* or *Gorayat* (who guarded the crop), the *Putwarry* (village accountant), and the *Canongoe* (confidential agent of Government, the depository and promulgator of the established regulations).

Zemindar's Proprietary Right.—In Bengal, disorders following the decline of the Mogul Empire destroyed the data for acquiring an accurate account of the village collections. No better mode for acquiring knowledge of the value of the lands appeared than a comparison of different years' collections. Besides, in Bengal, instead of a division of the crop or of its estimated value, the whole amount payable by a cultivator was consolidated into one sum called the *Asul* or original rent, while the Zemindar, Patwari and Mandal were paid not by a share of the Zemindary portion of produce but by separate grants of land, or by cultivation on lower terms, or partly in money. It was this practice that thus gave the Zemindar a proprietary right in the soil more than if he were paid by a portion of the produce like the Officers of Government. This furnishes the foundation of the differences of opinion appearing in later official discussions of the topic.

The leading members of the Supreme Government were accordingly impressed with a strong persuasion of the proprietary right in the soil possessed by the Zemindars.

Zemindars preferred for Settlement.—The first point proposed in the Interrogatories framed by Cornwallis and circulated by his Government was, 'With whom should Settlement be made? A general concurrence prevailed in favour of settlement with the Zemindar.

Amount of Assessment.—The second and more difficult point was the amount of Assessment to be fixed on the lands. The proposed fixity of the amount made it necessary that it should be fixed with the utmost accuracy as the limit of the resource which Government could ever in future derive from the land. But it appears that means were not to be found for this accurate knowledge. The lights formerly derivable from the Kanungo's office were no longer to be depended upon, while a minute scrutiny into the value of lands by measurement and comparison of the village accounts was prohibited by orders from home. In these circumstances, the attention of Government was excited by an estimate of the resources of the country, extracted from the ancient records, by Mr. James Grant, the officer in charge of the Khalsa or Exchequer Office. Grant tried to show that the real value of the lands had been concealed and about half a million £= about Rs. 40 lacs was annually intercepted by intermediaries, the native officers.

The misconceptions of Grant regarding assessment of Bengal have been explained by Shore in his Minutes.

The actual produce to Government in former years, drawn from the scanty information which the Collectors had the means of procuring, was the basis on which Assessment was ultimately fixed as "a moderate *Jumma*" as was insisted upon by the Directors.

The Revenue thus permanently fixed was Sicca Rs. 2,68,00,989 for Bengal, Bihar and Orissa in 1791.

Sir John Shore's reply to Grant.—Sir John Shore gives a comprehensive reply to the position and statistics presented by Grant in his aforesaid three works. His reply is given in his monumental Minute of June 18, 1789. Shore bases his position on "practical experience in the collection and management of revenue which Mr. Grant does not profess to have acquired". He also points out that while Philip Francis maintained that Bengal was grossly over-assessed, Grant held that Bengal was under-assessed, and that both these views were influenced by the circumstances of the times in which they were expressed. Francis was speaking of the period of Quinquennial Settlement which was notorious for its revenue demand being at its highest as a result of unfettered farming. Grant, on the other hand, wrote at a time of scarcity between the years 1784-1787 and of consequential decreased Government demand. Following the famine of 1770, there was another famine in 1784 succeeded by flood in the eastern province in 1787 and partial scarcity in 1788. As an instance of fall of revenue, the revenue of Dacca province which was over Rs. 38 lacs in 1776 was in 1788 reduced to about Rs. 29 lacs.

It would be more helpful to present Shore's views in his own words as far as possible.

Cossim Ali's Assessment Grant considers as fair and Shore as pillage.—The main proposal of Grant is that Settlement should be made on the basis of the amount of Cossim Ali's Assessment of 1763. Sir John Shore exposes the injustice of this Assessment as follows :—

Jaffier Khan's Assessment marks the limit.—He points out that the increase of Assessment by a comparatively small sum of Rs. 14 lacs was obtained by Jaffier Khan (Murshid Quli Khan) by measures of the greatest severity, dispossessing Zemindars, and inflicting upon them personal indignities and tortures to compel them to a discovery of their resources from land (paragraph 15 of Shore's Minute).

From the tenor of the measures pursued by Jaffier Khan, it would appear that the country was then assessed to the utmost amount it would bear (16).

Shujah Khan also held this Assessment to be what the country could bear, because he made some additions to it and yet was popular, while he also restored the Zemindars (21).

Aliverdi Khan's impositions gave no relief to the country from the effects of Maratha invasions. They were instigated by the contributions made by the Zemindars to the cost of his wars, proving that they were capable of paying an increased revenue (22).

Cossim Ali's augmentation of revenue was dictated by his own precarious position (23).

Nawabi levies arbitrary and not proportional to produce.—The Nawabi additions to revenue in the shape of imposts (Abwabs) were against the Mogul Constitution (25).

These were not supported by the improvement of the country in opulence, agriculture, or population, in a period of wars and unrest from Jaffier Khan to Cossim Ali (28).

The imposts thus levied by the Nazims or Zemindars were naturally passed on to the ryots. "The Nazims exacted what they could from the Zemindars, and great farmers of revenue, whom they left at liberty to plunder all below, reserving to themselves the prerogative of plundering them in their turn, when they were supposed to have enriched themselves with the spoils of the country" (39).

No calculation was made of the proportion which the new levies bore to the produce of the lands (43).

Thus Cossim Ali realised for the State nearly all that the ryots had paid (45).

He demanded in one or two years an increase of revenue exceeding the augmentation of nearly the two preceding centuries (42).

Thus the balance of unpaid revenue between 1761-1762 is stated in the Public Accounts at nearly Rs. 80 lacs (47).

To cite a few illustrations to show that Cossim Ali's Assessment was almost like a paper assessment and not realisable, the farmer of Dinagepoor, Ramnaut Baddie, engaged to pay a revenue of Rs. 26,44,733 out of which a sum

exceeding Rs. 7 lacs remained unrealised (49). Similarly, at Rungpōor, the assessment was made by Cossim Ali's Aumil at Rs. 11,29,324 against a balance of Rs. 3,57,986. The amount realised was Rs. 6,68,962 (62).

Thus Cossim Ali's demand was a mere pillage and rack-rent (77).

Other miscalculations of Grant.—Besides taking Cossim Ali's settlement as a fair basis of assessment, Grant considers alienated lands as an available fund for increasing the revenue of Government. According to Shore, this view might apply to land alienated since the Dewani but not to the *Nankar* or *Chakran* lands, the produce of which had been allowed to meet the actual charges of collections (113).

Grant also holds that assessment of Dewani lands may be enhanced because that of the ceded lands has been enhanced by the Company. Shore answers that the revenues of the Dewani lands in 1765 were much higher than they were in 1760 when the Company came into possession of the ceded lands. The latter admitted of enhancement when the former required abatements (121). Moreover, if the Dewani land under the Company had been as capable of increase as the ceded lands, the revenues would have been enhanced. But this had not been done under 18 years' European management (123).

Grounds against enhancement.—The grounds against enhancement which are ignored by Grant, as pointed out by Shore, are :

(1) Diminution in population from the famine of 1770 by which a fifth of it had perished ; followed by the famine of 1789 and the floods of 1787 ; and

(2) Decrease of the productive labour of the country after 1770.

A period of 18 years for the recovery of a fifth of the population together with deductions for subsequent calamities is insufficient (124).

According to Sir W. W. Hunter, 35 per cent. of total and 50 per cent. of agricultural population passed away in the famine of 1770. He also states that " in 1771 more than $\frac{1}{3}$ of the cultural land was returned in the public accounts as 'deserted.' In 1776, the entries in this column exceeded $\frac{1}{2}$ of the whole tillage. For the first 15 years after the famine, depopulation steadily increased."

Shore also furnishes important information regarding the collections of the times.

He states that there is no uniformity in the demands upon the ryots. The rates not only vary in the different Collectorships but in the Pergunnahs composing them, in the villages, and in the lands of the same village (219).

Ryots' aversion to Pottahs.—Ryots sometimes show aversion to receive *Pottahs* for fear lest fixed rates become the basis of future impositions (241).

Various Charges of Collection.—The gross *jumma* or the amount paid by ryots is liable to deductions on account of the following charges, viz.:—

(a) *Mufussil charges* or expenses of petty officers such as *patwaris*, peons, pykcs, etc., in collecting from the ryots ;

(b). *Pergunnah charges* or expenses of the officers employed in collecting and Superintending the business of the *Pergunnahs*. These must be deducted from the revenues of the *Pergunnah* or the aggregate of the rents of the villages making up the *Pergunnah* ;

(c) *Sudder Cutchery Charges*, i.e., expenses of the head office of the Zemindary ;

(d) *Poolbundy* or charges for repairs of bridges or embankments.

All these charges are indispensable and must be defrayed from the gross collections, the amount paid by the ryots (290—297) ;

(e) *Moshaira* or charges for the maintenance of the Zemindar and his family.

Thus the *Sudder jumma* demanded by the Company is not the *Sudder Jumma* of the country. Deductions are made from the former of established Zemindary charges.

In concluding a settlement with the Zemindars, Government must determine what charges shall be paid by them and the amount of their *jumma* must be regulated by this consideration (304).

To quote an instance, the District of Nuddea was let to farm for five years, and Government having appropriated the whole produce, as far as they could discover it, was obliged to grant allowances as a provision both for the Zemindar and his family (307).

The Government should avoid entailing upon itself these charges and leave every Zemindar to take care of his own family, lest the amount of these pensions become enormous (309).

Charges for Donations.—In the list of the Zemindary charges will be found charitable donations which ought to be paid by Government (311).

The Settlement should be so estimated as to allow the Zemindars a profit of 10 per cent. over and above the expenses of collection as stated above (365).

Zemindars' Share of Revenue.—Shore thus corrects a widespread misunderstanding that the Permanent Settlement only allowed to the Zemindars 1/10th of revenue. It was 1/10th of the net revenue that was left over after paying to the Zemindar the various charges of collection at each of its stages from the Mufussil to Sudder, as described above.

Shore's Estimate of Gross Produce.—Shore also gives an account of the Land Revenue system of the times by assuming :

- (1) Rent at $\frac{1}{2}$ of gross produce ;
- (2) Government revenue for Bengal at Rs. 2 crores ;
- (3) Charges of collection (those paid by Zemindars, farmers, and other gradations of land-holders and renters) at 15 per cent. = Rs. 30 lacs ;

(4) Intermediate profits between Government and the ryots at 35 per cent.
=Rs. 70 lacs ;

(5) Gross collections at Rs. 3 crors= $\frac{1}{2}$ of gross produce ;

(6) Six crors as value of total produce of land excluding alienated lands.
(109).

It may also be noted that even Grant in 1788 proposed that the Company's demand be restricted to *Assul*, *Abwab*, *Kefayet* and *Tawfur* or the ascertained legal exaction at the time of the Dewani, subject to a deduction of established amount of all the mufassil charges, and those for native management of collections.

Even Hastings and Barwell proposed in 1775 that all new taxes imposed since the Dewani be abolished (434).

Grants' Estimates.—Grant estimates the cultivator's rent at $\frac{1}{4}$ of the gross produce of the soil. He also estimates the total area of Bengal to approximate correctness at 90,000 square miles. Of this total area, he estimates $\frac{1}{5}$ to be 'hilly, jungly, barren and useless; $\frac{1}{5}$ as mostly unproductive as lying under water, towns, highways, woods, or pleasurable wastes; $\frac{2}{5}$ a rich common pasturage exempted from taxation; and the remaining $\frac{1}{5}$ proportion alone in cultivation liable to the rents of the territorial proprietary Government at the established rate of the *Rebba* or $\frac{1}{4}$ of the yearly gross produce of 18,000 square miles, each of 1936 Begas, which, at the medium value of the lands of the 24-Pargannahs, being $1\frac{1}{2}$ Re. per Bega, should yield (exclusive of salt profits, but including the foregoing collection for charges) a revenue of Rs. 5,22,72,000."

It may be remembered that the above estimate of Grant is vitiated by an initial error. It is to calculate the amount of gross rental of Bengal on the basis of the rate of rent prevailing in the 24-Pargannahs as the average rate for whole Province. Even on the basis of Re. 1 as rent his estimate of revenue, after deductions of the tenth due to the Zemindars, would amount to Rs. 3,13,63,200 or Rs. 57,38,977 in excess of the highest Mogul assessment.

These Estimates not based on actuals.—These estimates of the value of land or of the gross ryoti rental of Bengal made by Grant and Shore towards fixing the assessment for Permanent Settlement must, however, be understood to have been merely theoretical or speculative estimates. The ultimate assessment on which the Permanent Settlement was based had no reference to the assets of the ryot. As has been admitted by Sir John Shore himself, "in tracing the progress of the assessment since the acquisition of the Dewani, we find that its amount has generally been fixed by conjectural estimates only".

As a matter of fact, the *Jumma* of the preceeding year was taken as the standard for fixing the assessment of the following year. At no time during the period from 1765 to 1789 the *Jumma* had any relation to the ryoti

rental. On the contrary, every Settlement made an addition to the previous assessment, because the Company needed additional revenue.

Shore also points out that even at the time of the Permanent Settlement the Company could not acquire an accurate knowledge of the ultimate value of the lands because it depended upon "a degree of knowledge, experience, and application in the Collectors, which is rarely to be found or attained". Indeed, he was very much against a Permanent Settlement on the ground that the Company's experience of revenue was still incomplete. He wrote in 1782: "I venture to pronounce that the real state of the districts is now less known and the revenues less understood than in 1776." His plan was in the course of a ten years' settlement to compel the Zemindars to reveal the real revenue capacity of every village and of every Pergunnah by giving lists of villages, showing their boundaries, areas and assets.

Increase of Assessment since Dewani.—The amount of revenue assessed at Permanent Settlement was thus determined by the amount of assessment of previous years and not by any calculations of ryoti rental, for which the necessary information or the machinery for obtaining it was not available to the Company. At the same time, it has been already seen that the Company's assessment since 1765, showed a steady increase without reference to what the Zemindars or the ryots could pay. To recapitulate the history of this assessment, under Verelst as Governor, according to the Fourth Report of the Committee of Secrecy of 1773, the Company's revenue doubled Aliverdi Khan's revenue of Rs. 1,76,81,466. We have already seen that Becher also had reported in 1769 to Verelst to the same effect, stating that "in Aliverdy Cawn's time, the amount of the revenue was much less" and how "this fine country" was being ruined by excessive assessment by which Zemindars who were bound to the ryots by natural ties were ousted by collecting agents called *Aumils* who had no concern for them. Warren Hastings stated that the nett collections of 1771 exceeded those of 1768 in spite of famine intervening in 1770. And yet the Quinquennial Settlement of Warren Hastings for the period 1772-1777 was marked by over-assessment based on bids by farmers ousting the Zemindars. The period presents a story of "huge deficits, defaulting Zemindars, deserting ryots, and absconding farmers". All the District Officers were at one in reporting that the country was over-assessed. Middleton considered over-assessment and public auction of farms as causing the famine of 1770 and insisted on "a universal remission of revenue." Reports of distress were made by District Collectors even in 1783, e.g., Patterson of Rungpoor or Rooke of Purnea. The distress at last moved Parliament to intervene in the Company's affairs, as already related. Walpole described the Company's "tyranny and plunder as making one shudder", while Chatham described their "iniquities so rank as to smelt to earth and heaven," followed by Burke's violent outbursts in Parliament and impeachment of Warren Hastings.

And yet all this agitation did not materially reduce the assessment. Grant, who is not guilty of under-estimating the assessment, gives the following figures for gross revenue (Mehal and Sayer) claimed in 1765, the year of the Dewani :—

			Rs. in lacs.
Bengal (Dewani Lands)	..	..	229
Bengal (Ceded Lands)	..	..	41
Bihar ..	..	..	84
Orissa (Midnapore)	..	..	14
Total ..			268

The "Gross revenue actually realised" for 1784 is given as follows :—

			Rs. in lacs.
Bengal (Dewani Lands)	..	..	137
Bengal (Ceded Lands)	..	..	62
Bihar ..	..	..	53
Orissa (Midnapore)	..	..	8
Total ..			260

If we deduct from this amount the Customs duty which Shore estimates at Rs. 11 lacs for Bengal in 1786, and which may be estimated at Rs. 15 lacs for Bengal, Bihar and Orissa, the land-revenue for the three Provinces will amount to Rs. 245 lacs.

We have seen that assessment was not reduced in spite of the famine of 1770, by which agricultural population was reduced by half as well as the area under cultivation. Adverse conditions continued, as we have seen, up to 1788, and did not allow the country to recover fully. Thus the position is that while the revenue established in 1765, was not a realisable one, and cultivation was considerably contracted during two decades of scarcity that followed, even the revenue of Rs. 245 lacs realised for 1784 was far too high and must have left nothing to landlords and ryots. And yet the Revenue Demand was pitched by Permanent Settlement at a still higher amount of Rs. 268 lacs (Sicca) on the basis of previous years' collections.

Excessive Assessment under Permanent Settlement : Taxation of future income.—It is clear from an examination of the available data that the revenue which was fixed by Permanent Settlement at the amount of Rs. 268 lacs for Bengal, Bihar and Orissa bore no relationship to what the ryots could pay and the Zemindars could collect from them. The assessment was far ahead of the actual collections. This is shown by the account of assessment which Grant has given. According to Grant, as has been stated above, the gross revenue established for 1765 for Bengal, Bihar and Orissa amounted to Rs. 368 lacs. After the famine of 1770, by which according to Sir W. W. Hunter cultivation shrank by half, the gross revenue must also be taken to have been reduced by half, i.e., to Rs. 184 lacs. If we deduct from this amount the amount

of Sayer Revenue which may be roughly taken at Rs. 14 lacs, the total gross Land Revenue Demand should amount to Rs. 170 lacs. Subsequent conditions of depression induced by both famine and flood did not permit the full economic and agricultural recovery of the country up to the time of the Permanent Settlement. In fact, "for the first 15 years after the famine," as already stated, i.e., up to 1785, "depopulation steadily increased." The realised revenue for 1784 which amounted to Rs. 245 lacs was thus far in advance of what the land could bear. When an even larger amount of Rs. 268 lacs was fixed as the revenue demand by Permanent Settlement, it far exceeded what should be considered as the fair amount of gross Land Revenue estimated at Rs. 170 lacs, as shown above. It is, therefore, quite clear that the assessment of Permanent Settlement was very much an advance assessment, i.e., an assessment which taxed the developments of the future which it estimated roughly at Rs. 1 coror.

Assessment determined by the financial needs of the Company.—The fixing of this amount of assessment was a most difficult undertaking for which Lord Cornwallis proceeded very warily so as to examine fully the evidence before any irrevocable step was taken. Therefore, there were Annual Settlements for three consecutive years from 1787, and it was not until the end of 1789, and the first weeks of 1790, that the final decision was made. Unfortunately, Lord Cornwallis had to fix the assessment with reference to the needs of the Company and the views of his Directors rather than facts or justice. Although Cossim Ali's Assessment of Rs. 247 lacs made in 1763 has been described by Shore as nothing short of "rack-renting and pillage" and was practically an assessment on paper, considering that only Rs. 65 lacs could actually be collected, yet the Company since 1765 had been always trying even to improve upon that assessment, as has been pointed out above. Shore, in his Minute of 18th June, 1789, frankly points out that "in 1786, the revenues of the Dewani lands of Bengal were more than they were for 1765," although conditions created by successive famines and floods had reduced cultivation by half. The fact was that the Company based their revenue demand on their own needs and not on the facts of actual Zemindary receipts or ryoti rental of those days. The practice followed was that the basis of the settlement to be adopted was the assessment of the preceding year while the assessment had gone on increasing since 1765 against the famines and floods of the period. As we have already seen, since 1769, the assessment had been always determined by farming at highest bids. Thus it is not quite correct to assume that the Permanent Settlement demand represented $\frac{10}{11}$ of the rental when the amount of the rental still remained to be ascertained. It is also to be noted that the proportion of $\frac{10}{11}$ is stated to have applied only to Bihar. The assessment in Bengal, as has been explained above, was based on the collections of previous years and there is nothing in the previous history of Revenue Administration to show that the proportion which the revenue bore to the gross assets of each estate had ever been ascertained with any approximation to accuracy.

Assessment of Future Development.—The excessive assessment of the Permanent Settlement was really fixed upon as the present price of a future profit. It amounted to about Rs. 1 coror, as has been calculated above. It was, therefore, quite natural that, in return for this exorbitant assessment, the Permanent Settlement offered to the Zemindars an absolute property in the prospective assets to accrue from the extension of cultivation and reclamation of vast areas of untenanted wastes and jungles then covering more than a third of the total area of the Province as estimated by Lord Cornwallis, and as much as $\frac{4}{5}$ as estimated by Grant. According to Pattle, a member of the then Board of Revenue, "the country brought under the Decennial Settlement was for the most part wholly uncultivated. Indeed, such was the state of the country from the prevalence of jungles infested by wild beasts that to go with safety from Calcutta to an adjacent district, a traveller was obliged to have at each stage four drums and as many torches," to chase them away. Lord Cornwallis knew that he was driving a very hard bargain with the Zemindars by his speculative assessment. In his letter, dated March 6, 1793, he wrote to the Court of Directors explaining "that it was the expectation of bringing the extensive waste and jungle lands into cultivation and reaping the profits of them that have induced many of the Zemindars to agree to the Decennial Jumma assessed upon their lands. If in this way, at any future time, a greater share of the rental went to the Zemindars and Talookdars than they had been accustomed to, he would only welcome it. It would, in the first place, give a real value to landed property which in itself would then be a firm security for the Government revenue (then so badly wanting), and at the same time contribute directly to accumulation of wealth in individuals and thus to general prosperity."

The Court of Directors also stated that they were convinced that "a permanent assessment must contain in its nature a productive principle, and that the possession of property and the sure enjoyment of benefits derivable from it will awaken and stimulate industry, promote agriculture, extend improvement, establish credit, and augment the general wealth and prosperity ... In every step of this progressive work, property becomes of more value, the owner of more importance, and the system acquires additional strength. Such surely appears to be the tendency and just consequences of an equitable fixed assessment" [Volume III, page 172 of *Firminger's Fifth Report*].

Thus apart from the financial needs of the Company, Permanent Settlement was resorted to as an economic measure to speed up the economic development of the country on the basis of Agriculture as its main industry. It imparted a strong impetus to extension of cultivation by securing its fruits in advance to those who would labour for it. It attracted capital to land in which it could be invested most profitably. It rehabilitated the Zemindars on a stable foundation, created land as a source of wealth and of individual prosperity as the foundation of social stability and national welfare, and paved the way of the growth of population and reclamation of waste lands

by the magic of property which turns sand into gold. The total cultivated area of the Province has now increased three times since Permanent Settlement.

The Fifth Report on the Assessment of Permanent Settlement.—The above calculations and conclusions regarding the excessive Revenue Demand fixed by Permanent Settlement so as to include in advance the cash value of future agricultural developments of the country and to take credit in the present for the unearned increments of the future are fully corroborated by the Fifth Report which is the most authoritative document on the subject.

According to the Fifth Report, "the amount of the Land Revenue which was now in Bengal to be fixed for ever" was the amount which, in the opinion of the Directors, would "prove equal to what they had, after consideration of the exigencies of Government, and of a reserve proper for extraordinary services, already had it in view to obtain." That is to say, the revenue fixed under Permanent Settlement was fixed with reference only to the needs of the Company, and not to the capacity of the country for bearing it. This it was not also yet possible for the Company to fathom. The Directors "lamented the want of better data" for a knowledge of the assets from land "than the experience of a series of past years (of collections), joined to the recent enquiries (made under Cornwallis) had afforded." In fixing the Revenue Demand "for ever", "they did not wish to expose their subjects to the hazard of oppressive practices, by requiring more." And if the Demand thus fixed was excessive, it was "on consideration of the extent of land which lay waste throughout the Province" and also in accordance with "what had formerly been the practice of the native Government in participating in the resources derivable from its progressive cultivation." Accordingly, "the demand from the land that was thus fixed included the demand from most of the uncultivated lands which were included in the Permanent Settlement, excepting such tracts as the Sundarbans" (Ascoli, *Early Revenue History*, page 132, N. 2).

In fact, Lord Cornwallis advocated the inclusion of waste lands in estates under Permanent Settlement because he believed that the waste lands would afford the landlords a real opportunity of increasing their profits (*Ib*). In his letter of 6th March, 1793, he wrote to the Court of Directors that "all waste lands form a part of the estate of the different landlords who agreed to the *Jumma* assessed upon these lands in the expectation of bringing them into cultivation and reaping its profits." Thus, what was kept outside the Permanent Settlement as a source of additional revenue included (1) "any addition which may be made from resumption" (assessment to revenue of lands illegally held free of revenue) and (2) "uncultivated lands, if that resource should be available," which meant tracts like the Sundarbans on the fage of the Bay of Bengal.

Why Cornwallis preferred Permanent Settlement.—Cornwallis did not agree with Shore that the Settlement should be for a period of 10 years during which the real revenue resources of the country might be ascertained. Cornwallis took the view that a mere 10 years' settlement will be equivalent to farming and could not be sufficient inducement to ensure the reclamation of the

extensive jungles of Bengal estimated by him at a third of the total area of the province, as has been already stated.

Political Considerations.—But not less important than economic were the political considerations which influenced the authorities in favour of Permanent Settlement. As Cornwallis pointed out: "In case of a foreign invasion, it is a matter of the last importance, considering the means by which we keep possession of this country, that the proprietors of the lands should be attached to us from motives of self-interest. A landholder who is secured in the quiet enjoyment of a profitable estate could have no motive for wishing for a change. On the contrary, if the rents of his lands are raised in proportion to their improvement, if he is liable to be dispossessed, should he refuse to pay the increase required of him, or if he is threatened with imprisonment or confiscation of his property on account of balances due to Government upon an assessment which his lands are unequal to pay, he will readily listen to any offers which are likely to bring about a change that cannot place him in a worse situation, but which holds out to him hopes of a better."

It may also be pointed out that the Permanent Settlement was decided upon as the best source of a certain revenue which was very much needed in its time by the Company to build up British Dominion in other parts of India. The Company had then to finance the cost of several wars and other measures which were forced upon them. The Rohilla war, the two campaigns against Tipoo Sultan, the prevention of the hostile Maratha demonstration against Oudh, the mission despatched to Nepal, the reduction of Pondicheri, all these brought the finances of the Company to a low ebb. As R. C. Dutt has pointed out, "in India an Empire was being acquired, wars were waged and the administration carried on at a cost of the Indian people without the British nation contributing a shilling." And the brunt of the cost was borne by the people of Bengal upon whose resources other Provinces like Madras and Bombay had freely drawn to meet the deficits of their administration. At home at this time England was also passing through the worst days, with France, Holland, Spain and Italy allied against her, the United States alienated, and national debt mounting up. R. C. Dutt further stated: "It may be said with strict truth that the conquests of Lord Hastings, like the conquests of Lord Wellesley, were made out of the resources furnished by permanently settled Bengal."

Decennial Settlement.—A Proclamation was issued on 10th February, 1790, announcing that a Settlement should be made for ten years with "the actual proprietors of the soil" of all denominations such as Zemindars, Chaudhuries or Talookdars. It was also stated that among the owners of the Talooks of those days there were those who paid the revenue of the Talooks directly to Government or through the Zemindars. Previously, the Zemindars had collected revenue from most of these Talookdars. Henceforth it was the rule that those Talookdars who were "the actual proprietors of the lands" should be exempted from the control of the Zemindars and should pay their revenue immediately to the public treasury of the District. In some Districts

of Bengal where the number of these petty landholders was considerable, the Collectors were directed to appoint Indian assistants or *Tahsildars*. Thus by the rules of the Decennial Settlement the Zemindars were confirmed in the tenure of what was recognised as their own land, but not in their position as Collectors for other landholders. The Principle of Settlement with the "actual proprietors of the soil" enjoined by the Directors was thus observed, in accordance with their interpretation of the term "Proprietor."

The Minute of 10th February, 1790, announcing the Decennial Settlement, contained within it the promise of its conversion into a Permanent Settlement, "provided such permanence should meet with the approbation of the Court of Directors, and not otherwise." The approbation of the Court of Directors was embodied in their letter of 29th August, 1792.

Effects of Excessive Assessment.—As the Fifth Report points out, "the proportion of the produce of a zemindary fixed as the Government share at $\frac{10}{11}$ of the rent paid by the tenantry, which had not in all cases been fixed with minute exactness, sufficiently shows that it must have been in most cases a large proportion." The immediate results of the Permanent Settlement were not what was expected. "The revenue was not realised with punctuality; and lands to a considerable extent were periodically exposed to sale by auction for the recovery of outstanding balances. In 1796, the land advertised for sale comprehended a Jumma or assessment of Sicca Rs. 28,70,061, the extent of land actually sold bore a Jumma or assessment of Rs. 14,18,756, and the amount of the purchase money Rs. 17,90,416. In 1797, the land advertised was for Rs. 26,66,191, the quantity sold was for Rs. 22,74,076, and the purchase money Rs. 21,47,580. Among the defaulters were some of the oldest and most respectable families in the country. Such were the Rajas of Nuddea, Rajeshaye, Bishenpore, Cossimjurah and others." [7b.]. Sometimes these sales did not fetch even the revenue in arrears, while in many cases they did not invite even any bids. As stated by A. D. Campbell, by 1815, $\frac{1}{3}$ or rather $\frac{1}{2}$ of the Zemindaries in Bengal passed out of the hands of the older families. According to Ascoli, an investigation made by Government in 1802 at Dacca showed that in that District, in the 10 years which had followed the Permanent Settlement, the increase by extension of cultivation amounted only to about $6\frac{1}{4}$ per cent. Mr. Strachey, giving an account of conditions at Midnapore in 1802, doubted whether its population had grown up to what it was before the famine of 1770, although "every body married and an unmarried man of 25 or an unmarried girl of 15 are hardly to be found." It may thus be reasonably assumed that the Zemindars must have taken at least 50 years to increase their share of the collections from $\frac{1}{11}$ th to $\frac{2}{3}$ or $\frac{1}{2}$.

The Fifth Report further points out that "besides the distresses which had befallen a large portion of the principal Zemindars, and the continual advertisements which were made in the public newspapers of land on sale for the recovery of arrears, the territorial revenue was far from being realised with the facility and punctuality deemed necessary. In consequence of the

heavy balances which at this time occurred, some of the members of the Board of Revenue went so far as to recommend a resort to the former practice of confining the landholders for enforcing the payment of arrears" (Minute dated July, 1799). One of the causes of the distress of the Zemindars was due to the fact that "under the general protection afforded by the Courts of Justice instituted by the British, their under-tenantry entered into combinations which enabled them to embarrass the landholders in a very injurious manner by withholding their just dues and compelling them to have recourse to a tedious and expensive process to enforce claims which ought not to have admitted of dispute."

The Fifth Report also states that the new attitude of the tenantry indicates "a change of circumstances which ought to be received with satisfaction, inasmuch as it evinced the protection intended to be afforded by an equal administration of justice to be real and efficient, and thus a foundation had been laid for the happiness of the great body of the people, and in the increase of population, agriculture, and commerce, for the general prosperity of the country."

Another cause which brought about the "ruin of some of the principal Zemindars and a great proportion of the landholders" was taken by the Fifth Report to be that most of them were not competent for the management of their large zemindaries. As instances it mentions the Rajas of Dinagepore, and Rajsahi "whose estates had been at different times attached and at length wholly sold." Thus one of the effects of the Permanent Settlement was the division of the larger estates and their transfer into the hands of better managers.

The new feature of the Permanent Settlement was its rules for distraint of property and holding the land as a security for the amount of the revenue assessed upon it. "Under the native Government, the recovery of arrears from defaulters was sometimes attempted by seizure and confiscation of personal property or by personal coercion or taking the administration of the Zemindary out of the hands of the defaulter and entrusting it to a Sezawul. The policy of this Government was adverse to the dispossession of a Zemindar and to prefer the succession of a near relation to the introduction of a stranger to the possession of a Zemindary." The British system and its sale law introduced a radical reform to which there was considerable opposition among the Zemindars. This feeling is expressed in a typical letter addressed by the Collector of Midnapore of February 12, 1802, to the Board of Revenue in which he states: "All the Zemindars with whom I have ever had any communication in this and in other districts have but one sentiment respecting the rules at present in force for the collection of public revenue. They all say that such a harsh and oppressive system was never before restored to in this country; that the custom of imprisoning landholders for arrears of revenue was in comparison mild and indulgent to them; and that the system of sales and attachments which have been substituted for it has in the course of a very few years reduced most of the great Zemindars of Bengal to distress and beggary and

produced a greater change in the landed property of Bengal than has perhaps ever happened in the same space of time in another age or country by the mere effect of internal regulations."

• **Advantages of Permanent Settlement to Zemindars.**—Although its assessment to start with proved thus to be rather excessive, the Permanent Settlement, according to the Fifth Report, ultimately improved considerably the condition of the Zemindars. "Under the native Government," as the Report points out, "the Zemindars were liable to an annual requisition for such an amount of revenue or tribute as a minute local scrutiny of the village accounts, aided by a measurement of the land, if necessary, might warrant, leaving them simply their *russoom* or established proportion of the produce, and their *nauncaur* or special grant of land, where such existed, joined with the advantage derivable from an extension of cultivation, or what might be obtained by reletting the land in parcels to under-renters, as a compensation for the trouble and risk of the charge; and subject to imprisonment, corporal punishment, and dispossession, in case of failure in the performance of their engagements. If they declined entering into engagements on the plea of excessive demand they were restricted to their allowance of *russoom* or *nauncaur*; while the land was liable to be farmed, or committed to the immediate management of an Officer of Government.

"By the terms of the Permanent Settlement, no further demand is to be made upon the landholder, whatever may be the augmentation of his resources, by increased cultivation, or any other means, than the amount of the *jumma* or revenue which he has already voluntarily engaged to pay."

• **Its Disadvantages.**—"On the other hand, he is declared not entitled to remissions, on the plea of loss from unfavourable seasons, inundation, or any other natural calamity; and in the event of his falling in arrear of the regular payment of the revenue, his land is liable to be sold in liquidation of the balance outstanding."

Another disadvantage to the Zemindars from the Permanent Settlement was that "though their own payments to the Government admitted of no delay but might be promptly enforced by exposure of the land to sale by auction," their "redress against their own defaulters" was subjected to "the slow progress of suits through the courts of judicature to which they were referred." Thus the Zemindar's case (as it was put in the letter of January 9, 1794, from the Collector of Burdwan to the Board of Revenue) was that it cannot "be possible for him to discharge his engagements to Government, with that punctuality which the regulations require, unless he be armed with powers as prompt to enforce payment from his renters, as Government had been pleased to authorise the use of, in regard to its claims on him, and that there should not have been established two modes of judicial process under the same Government: the one summary and efficient, for the satisfaction of its own claims; the other, tardy and uncertain, in regard to the satisfaction of the claim due to its subjects, more especially where ability to discharge the one demand necessarily depends on the other demand being previously realised."

The Collector of Midnapore also wrote in the same strain (in his letter of February 12, 1802) : " Zemindars had not the same powers over their tenants, which Government exercised over them. It was notorious that many of them had large arrears of rent due to them which they were utterly unable to recover, while Government were selling their lands for arrears of assessment."

Thus " great transfers of landed property, by public sale and dispossession of Zemindars, took place in an extreme degree during several years after Permanent Settlement."

Mr. Roche, in his Minute recorded on the Revenue Consultations, dated 12th August 1815, estimated that " probably one-third or rather half of the landed property in Bengal had been transferred by public sale on account of arrears of revenue."

"Under the circumstances which have been explained, it may not appear extraordinary if the landholders, in contemplating the new system, were more struck with the inconvenience they experienced from its introduction, than they were with any advantages which they could promise themselves from its ultimate operation."

A Historical Retrospect.—It has been already related that the British Dominion in Bengal was itself built up on the basis of the advantages afforded by the Zemindary system and the Permanent Settlement. The acquisition by the Company of Zemindary rights in the lands of Calcutta then known as Dehi-Calcutta, Sutanati, and Govindapur in Pergunnah Paikan, and of even Patni rights in Simla, and again of zemindary rights in 24-Pergunnahs, and in the Ceded Districts, in the days of the Moghul Empire, first brought home to them the utility of the Permanent Settlement. Later, there appeared among the Nazims or the Moghul Viceroy of Bengal in the days of the decline of the Moghul Empire some who broke with the Moghul method and tradition of Revenue Administration, and sought to augment their revenue by imposing new levies upon the established revenue or *jumma*, and where these impositions were not agreed to, to replace the old and hereditary Zemindars by Farmers or their official agents. The most important of these Nawabs was Murshid Quli Khan, under whom the traditional system of Permanent Settlement was kept in abeyance for the time being. But even he did not fail to recognise the right of the dispossessed Zemindar to receive an allowance. As Warren Hastings put it later : "When a Zemindar was divested of authority, it was the rule of the Moghul Government to allow him a subsistence out of the rents of the Zemindary, amounting to a tenth".

When the Company obtained the Dewani, the Revenue was their chief aim, and they accordingly tried to follow in the footsteps of Murshid Quli Khan by running after farmers in preference to the Zemindars, and an annual or periodical settlement in preference to Permanent Settlement. As we have seen, this farming system proved to be a failure in the accumulation of large arrears of revenue in different districts. In the time of Verelst as

Governor, the reaction to the farming system asserted itself. In their letter, dated November 11, 1768, the Court of Directors first pointed out "the great utility of letting the lands on long leases". Later, in their letter of June 30, 1769, they declared: "Our intention is to proceed with this work (of Revenue collection) without taking off from any of those profits and emoluments which have usually accrued to the Zemindars who have inherited their lands from their ancestors. We have no view to prejudice the rights of the Zemindars who hold certain districts by inheritance". In pursuance of the attitude of the Court of Directors, Verelst tried to rehabilitate the Zemindars by making considerable reductions of revenue, in view of the distressed condition of the country.

Warren Hastings, as we have seen, was an ardent advocate of the farming system, but even he was very much impressed by the utility of the Zemindary system. Only he wanted "to settle with the Zemindars on the footing of farmers", and where his enhanced revenue demand was not acceptable to the Zemindar, and the Zemindar had to be replaced by farmer, he allowed the dispossessed Zemindar a percentage of revenue for the subsistence of himself and his family. He also states that "he does not on principle favour the farming system, because it would reduce Zemindars to the position of mere pensioners and efface their claims as proprietors, while it would also lead to the passing away of the original Zemindars". This he thought was "neither consistent with our notions of equity nor with the Directors' orders that we do not by any sudden change alter the constitution nor deprive the Zemindars or Talookdars of their ancient privileges and immunities". He also made clear his position with reference to the old and hereditary Zemindars by stating that "from a long continuance of the lands in their families, it is to be concluded they have rivetted an authority in the district, acquired an ascendancy over the minds of the ryots, and ingratiated their affections. From continuing the lands under the management of those who have a natural and perpetual interest in their prosperity, solid advantages may be expected to accrue". Eventually, in his own Quinquennial Settlement, as he himself points out "a greater portion of the country was actually farmed to the Zemindars themselves than to other persons". His fault was that the revenue was not fixed but was assessed on the basis of speculative bids. He himself admits that "lands were let in general too high", but he tried this "to find out the real value of the lands, for which he let them to the highest bidders, and disposed of the farms by public auction". But, unfortunately, as he admits, "the farmers engaged for a higher revenue than the districts could afford".

Suggestions for a Permanent Settlement as the only way to the recovery of the country from the effects of the famine of 1770, and of over-assessment under Farmers, began to pour in from the Provincial Councils and the District Collectors at this time. In January, 1773, the Council of Patna definitely recommended a Permanent Settlement. P. M. Dacres, Chief of the Calcutta Committee, strongly recommended a Permanent Settlement with the Zemindars so as to "fix the rent in perpetuity and trust to a sale of their property

as a security for their payments". These views were also expressed by other distinguished local officers like Middleton, Vansittart and Ducarel. These officials were, therefore, the first advocates of Permanent Settlement. They were followed by a more distinguished advocate, Philip Francis, whose charge against Warren Hastings was that he was out "to annihilate that rank of men in whom the inheritance and property of the lands of Bengal are vested". He frankly held that "the Government cannot descend to the ryot" and that "the purpose of the enquiries into the valuation of lands", as proposed by Hastings, was simply to "extract from the people the utmost they can pay". It was the writings of Philip Francis which practically shaped the final British Revenue policy which was enunciated in Pitt's India Act of 1784. Thus Francis ranks as the originator of the Permanent Settlement. Pitt's India Act of 1784 contains definite provisions "for settling and establishing upon principles of moderation and justice, according to the laws and constitution of India, the permanent rules by which their *respective* tributes, rents, and services, shall in future be rendered and paid to the said Company, by the said Rajahs, Zemindars, Polygars, Talookdars and other native landholders".

The wording of this provision shows that all the different classes of landholders then existing in the country should be recognised by Government and that the tributes, rents, and services, which were already established in the country, should henceforth be fixed in a permanent manner. The word "respective" shows that the traditional rate at which the contributions of the different classes of landholders had been established should be recognised by Government.

Status and Rights of Zemindars.—Although opinion had thus been forming in favour of the Zemindars and Permanent Settlement since the time of the Dewani, a prolonged and acute controversy centred round these topics. Many leading personalities in British History engaged in that controversy, both in India and in England, men like Grant and Shore, Warren Hastings and Philip Francis, Pitt, Fox, Burke, Dundas and Lord Cornwallis. Philip Francis, who, as we have seen, ranks as one of the originators of the scheme of Permanent Settlement with Zemindars, supported the Zemindary system on more fundamental social grounds. As he puts it: "The idea itself (i.e., Hasting's scheme of farming) supposes the extinction of those successive ranks of subordination in society through which the operations of Government descend by regular and easy gradations from the summit to the base. When the simple and natural channels of authority are quitted or decomposed, the State itself loses that shape and proportion which constitute its strength and qualify it for duration."

Opinion in British Parliament was formed by Edmund Burke who made the measures undertaken by Warren Hastings, in farming out lands to the highest bidders by displacing the Zemindars, one of the grounds of his impeachment. Burke framed the charge in the following words which throw light on the whole situation: "The property of the land of Bengal was, according to the laws and customs of that country, an inheritable property, and

that it was, with few exceptions, vested in certain natives, called Zemindars or landholders, under whom other natives, called talookdars and ryots held certain subordinate rights of property or occupancy in the said lands; That the said natives were Hindus, and that their rights and privileges were grounded upon the possession of regular grants, a long series of family succession and fair purchase; That it appeared that Bengal had been under the dominion of the Mogul and subject to a Muhammadan Government, for above two hundred years; That, while the Mogul Government was in its vigour, the property of Zemindars was held sacred; and that, either by voluntary grant from the said Mogul, or by composition with him, the native Hindus were left in the free, quiet and undisturbed possession of their lands, on the single condition of paying a fixed certain and unalterable revenue or quitrent, to the Mogul Government; That this revenue or quitrent was called the *Ausil Jama* or original ground rent of the provinces, and was not increased from the time it was first settled in 1573 to 1740 when the regular and effective Mogul Government ended; That, notwithstanding that the right of property and inheritance had been repeatedly acknowledged by the said Warren Hastings to be in the Zemindars and other native landholders; and notwithstanding that he had declared 'that the security of private property was the greatest encouragement to industry on which the wealth of every State depended', the said Warren Hastings nevertheless, in direct violation of these acknowledged rights and principles, did universally let the lands of Bengal in farm for five years, thereby destroying all the rights of private property of the Zemindars, thereby delivering the management of their estates to farmers; and transferring by a most arbitrary and unjust act of power the whole landed property of Bengal from the owners to strangers" (Burke's works, Volume VII, page 109).

It must, however, be remembered that Warren Hastings did not make any attempt to defend himself on the ground that the Zemindars had no right of property in their lands, in view of the opinion that he had already expressed on the subject. He was only anxious that before the Zemindars were restored "to the position of their lands and the management of their revenues, care should be taken to establish some mode of guardianship with a view to remedy the defects from the minority and incapacity of the Zemindars" (Hasting's Memoirs, page 121).

We have already seen how the Act of 1784 decided the question finally by restoring the Zemindars to the position they had claimed and led up to the Permanent Settlement. The Court of Directors explicitly stated their opinion "that the spirit of the Act would be best observed by fixing a Permanent Jumma on a review of the Assessment and actual collections of former years and by forming a Settlement in every practical instance with the landholders." In pursuance of these orders, Lord Cornwallis instituted elaborate enquiries into the conditions of cultivators, of landholders and tenants of every description, their rights under the Mogul Government before its decline,

the laws and usages which had since prevailed in settling the rents payable by the Ryots and other under-tenants to the Zemindars or the superior landholders; what new impositions or exactions have been introduced under the Company's administration and such other matters (Harrington's *Analysts*). The results of these enquiries were summed up by Shore (afterwards Lord Teignmouth) in a series of Minutes in which the respective rights of the agricultural classes from the Zemindars to the Ryots were carefully set forth and recorded. Shore's conclusions were finally adopted by Lord Cornwallis and were embodied in a series of legislative enactments which are now known as Permanent Settlement. These Regulations explicitly declared that the Zemindars or landholders were the actual and hereditary proprietors of the soil. They were not also passed except after a good deal of deliberation. They were the results of years of long and thorough enquiry in India and were also submitted for sanction to the Court of Directors and the Ministry in England. Mr. Dundas, the then President of the Board of Control, thus writes to Lord Cornwallis on September 17, 1792: "I thought it indispensably necessary that the measure should originate with the Board of Control, and likewise that I should induce Mr. Pitt to become my partner in the final consideration of so important and controverted a measure. He, accordingly, agreed to shut himself up with me for ten days at Withledan and attend to that business only. Charles Grant stayed with us a great part of the time. After a most minute and attentive consideration, we were glad to find Mr. Pitt entirely of the same opinion with us. We, therefore, settled a despatch upon the ideas we had formed and sent down to the Court of Directors."

It is to be remembered that the point at issue in these fateful revenue arrangements was whether Zemindars were proprietors of the soil or were mere collectors of revenue, whether they had or had not right of property in their land. First, we have seen Mr. Grant, the Serishtadar of the Board of Revenue, strongly maintain that they are merely collectors of revenue and that the Government had perfect right to dispense with their services and appropriate their estates. The Government of Lord Cornwallis, and the Court of Directors dissented from this view. To quote from a despatch of the Court of Directors: "We have perused with attention Mr. Grant's discussion of rights of Zemindars; but we should have thought our supreme Government very blameworthy if, upon his suggestion, or being ever so much urged to adopt that line or conduct by the Committee of Revenue, they had ventured to issue any public declaration which would have abrogated the claims the Zemindars have been supposed to enjoy to an hereditary possession; and thereby precipitately committed the national faith and honour upon a subject of so much magnitude. Neither can we observe without astonishment the levity with which this important consideration has been treated by the Committee. We believe it is a fact that many of the present Zemindars are the lineal descendants of those persons who possessed the lands before and after the conquest of Bengal by Akbar about two centuries ago. In

like manner, it is certain that the idea of an hereditary tenure has been sanctioned by repeated discussions in the British Parliament. It has been recognised also by the undeviating practice of our Government in Bengal and of all the Dewany Courts since our possession of the country, and that, not as mere acts of grace, but as the dues of justice. With all this evidence of fact before us in favour of the Zemindars, we should not hold ourselves warranted in so monstrous an exertion of the powers vested in us by the Legislature, as that of multiplying upon a mere theoretic opinion all the supposed property of an extensive territory." It was this sort of opinion that expressed itself in the Preamble of Regulation II, 1793, that "the property in the soil was vested in the landholders."

Summary of considerations for Permanent Settlement.—We may now summarise the various considerations which weighed with the authorities in deciding for Permanent Settlement. As has been already stated, the Company under the Dewani had undertaken heavy financial obligations such as payment of Rs. 26 lacs to the Mogul Emperor, the cost of maintaining an army, and also the administrative and domestic expenses of the Nawab Nazim, as already detailed. In addition to these obligations, the Company had to make territorial payments in England which on an average amounted annually to more than a crore of rupees. Money was also required for the Company's "Investments" which implied that a certain portion of the territorial revenue of Bengal should be reserved every year for the purpose of purchasing goods for exportation to England. In the year 1766, the amount set apart for this purpose was more than 30 lacs and it mounted every year till in 1780 it amounted to about a crore of rupees. Besides these financial obligations, we have already referred to the demands made upon Bengal's revenue by British enterprise in other parts of India and the need of financing its schemes of conquest. The other consideration which influenced Lord Cornwallis in favour of a Permanent Settlement with Zemindars was the failure of all previous attempts made by the Company for direct collection of revenue in imitation of Murshid Quli Khan. It is already stated how the result of this innovation of Murshid Quli Khan was very small in terms of revenue, so that his successor, Shuja Khan, restored the Zemindars to their traditional task of collection. Since the Dewani the Company tried various methods of direct collection and the farming system which proved ruinous to the country and resulted in the extinction of a highly serviceable collecting agency which could not be replaced by inexperienced foreign agency. Thus there was no other alternative but to have the Permanent Settlement when all other systems had failed, so that the revenue might be placed on a stable basis and an assured revenue was forthcoming from the three provinces. The third consideration was to reduce the cost of collection of revenue. Direct ryotwari collection was not feasible in those days without preparation of a record-of-rights at an enormous expense and through a trained and experienced agency which was not available. The cost of Settlement operations even at the present day is estimated at Rs. 800

to Rs. 1,000 per square mile. In the then state of the finances of a newly-settled province, the Company was not financially able to launch upon such a vast and expensive scheme of Settlement operations which would have, moreover, taken a long period for completion. Then, again, direct ryotwari collection was liable to loss of revenue through remissions and abatements against drought, flood, and other natural calamities affecting agriculture. Thus, in those days, the Company fell back upon the Zemindary system as the cheapest system of collection.

It has been already stated how Permanent Settlement also gave a natural impetus to extension of cultivation and reclamation of waste lands. It was also recognised in those days that if the Officers of the Company were free from the trouble of revenue collection, they would be able to give more time to general administration the efficiency of which was then of great importance specially in the matter of administration of justice, maintenance of law and order, regulation of Ports and Customs, consolidation of newly acquired territories, and the like.

Lastly, it may be stated that Permanent Settlement by confining the Zemindar only to land revenue led the Company to appropriate what is known as the Sayer Revenue and other sources of revenue of those days. Hitherto, the Zemindar had the right to all excise revenue including license fee for excise shops and also duties on raw silks, beetle leaves, salt and the like. By an advertisement dated 11th June 1790, the management and collection of Sayer Revenue was separated from the zemindary charge and placed directly under Government.

The Government also took over many of the administrative duties which were discharged by the Zemindars through the ages. These included the following :—

(1) Police duties, for which the Zemindars had to maintain a Police force (called *Thānadari*) and Village Watchmen. The Fifth Report states how Burdwan had to maintain 2,400 armed constables and 1,900 zemindary paiks. By Regulation XII of 1793 Zemindars were relieved of these Police duties.

(2) Jurisdiction over petty Civil Court suits.

(3) The duty of guarding the Ghats or passes in the Western Frontier of the province for which Zemindars known as Ghatwalls maintained armed forces.

(4) The maintenance of Land Revenue records.

(5) Supply of provisions for Government officers on tour, and for army on the march.

(6) Excavation of wells, tanks and provision of irrigation works and embankments.

(7) Maintenance of places of worship and religious and charitable institutions. We have already referred to Sir John Shore's statement that "in the list of zemindary charges there will be found charitable donations which ought properly to be paid by officers of the Government."

Description of conditions in Regulation II of 1793.—The entire situation of the times is best described in the Preamble to Regulation II of 1793, from which the following extract is made :—

“In the British territories in Bengal, the greater part of the materials required for the numerous and valuable manufactures, and most of the other principal articles of export are the produce of the lands. It follows, that the commerce and consequently the wealth of the country must increase in proportion to the extension of its agriculture.

“The extensive failure or destruction of the crops that occasionally arises from drought or inundation is in consequence invariably followed by famine, the ravages of which are felt chiefly by the cultivators of the soil and the manufacturers, from whose labours the country derives both its subsistence and wealth. Experience having evinced that adequate supplies of grain are not obtainable from abroad in seasons of scarcity, the country must necessarily continue subject to these calamities, until the proprietors and cultivators of the lands shall have the means of increasing the number of the reservoirs, embankments and other artificial works by which, to a greater degree, the untimely cessation of the periodical rains may be provided against, and the lands protected from inundation ; and, as a necessary consequence, the stock of grain in the country at large shall always be sufficient to supply those occasional but less extensive deficiencies in the annual produce, which may be expected to occur, notwithstanding the adoption of the above precautions to obviate them. To effect these improvements in agriculture, which must necessarily be followed by the increase of every article of produce, has accordingly been one of the primary objects to which the attention of the British administration has been directed in its arrangements for the internal government of these provinces. As being the two fundamental measures essential to the attainment of it, the property in the soil has been declared to be vested in the landholders, and the revenue payable to Government from each estate has been fixed for ever. These measures have at once rendered it the interest of the proprietors to improve their estates, and given them the means of raising the funds necessary for that purpose.

“When the extension of cultivation was productive only of a heavier assessment, and even the possession of the property was uncertain, the hereditary landholder had little inducement to improve his estate ; and monied men had no encouragement to embark their capital in the purchase or improvement of land, whilst not only the profit, but the security for the capital itself, was so precarious. The same causes therefore which prevented the improvement of land depreciated its value.”

Thus the task of bringing about the reclamation of waste lands and extension of cultivation was left by the Permanent Settlement to the Zemindars. This meant a large capital outlay at the outset to bring the wastes, marshes, and jungles of those days under the plough. This sort of agricultural enterprise was beyond the resources of the poor tenantry of those days who, for want of

staying power; died by thousands in the famine of 1770, from the failure of a single crop. In general, it may be stated that the Zemindars brought the wastes and jungles under cultivation by (a) clearing jungles, draining swamps and marshes at their expense; (b) offering temporary exemption of rents and progressive rents to tenants; (c) supplying money and seeds to cultivators and paying for their maintenance before they could gather in their crops; and (d) bringing cultivators from elsewhere and settling them on their lands at their expense. All this activity and industry on the part of the Zemindars as a consequence of the Permanent Settlement has received a judicial acknowledgment in the Great Rent Case of 1865. In a word, it is the Zemindars that made roads, drained swamps, excavated tanks, dug wells, and also laid the basis of the cultural development of the country by establishing schools and other charitable institutions. This kind of enterprise on the part of Zemindars was later availed of by the Government itself with reference to the reclamation of the Sundarbans which were let out in lots to capitalist Zemindars between 1825-1838. It was impossible for the Government to find tenants who could lay out capital for clearing jungles and reclaiming wastes. It is beyond the power of any tenantry to undertake such extensive processes of reclamation attended with risks.

It is sometimes assumed that the natural growth of population automatically brings about extension of cultivation, but such extension cannot apply to lands requiring outlay to fit them for settlement. On this subject the following remarks of the great Economist, Thorold Rogers [*Political Economy*, page 153] may be quoted: "There is not a shadow of evidence in support of the statement that inferior lands have been occupied and cultivated as population increases. The increase of population has not preceded but followed this occupation and cultivation. It is not the pressure of population on the means of subsistence which has led men to cultivate inferior soil but the fact that these soils being cultivated, in another way, or taken into cultivation, an increased population became possible. How could an increased population have stimulated a greater labour in agriculture, when agriculture must have supplied the means on which that increased population would have existed? To make increased population the cause of improved agriculture is to commit the absurd blunder of confounding cause and effect."

Indeed, it is the Zemindars alone who could help tenants to make cultivation profitable by improving irrigation, building Bunds, damming streams and otherwise trapping water for use in the dry season, supplying improved seeds, arranging for improvements of the breeds of cattle, making roads, and instituting *hats* and bazars to open up the rural areas to civilisation. In this way also the Zemindar capitalists are responsible for introducing the cultivation of such new crops as Indigo and Jute, Silk and Sugarcane, for which a large organisation was necessary at the beginning. In some cases, the capitalists were notorious for their treatment of cultivators as slaves, as in the case of the Indigo industry, where they were compelled to grow Indigo

on any plot pointed out by the planter, and, on failure, was oppressed and tortured with impunity, and also were compelled to receive payments at rates dictated by the capitalists. The development of Tea Industry in Assam presents also a similar history. The abuses of capitalism have not marked the history of Jute Industry, but the grower is still exploited by a ring of capitalists who cannot be controlled by the Zemindar. But the fact of the matter is that all these agricultural developments were due to a large investment of capital to which the ryots were not equal.

Economic conditions at the time of the Permanent Settlement : Colebrooke's "Husbandry in Bengal."—A reliable picture of the economic conditions of the country at the time of the Permanent Settlement is given in the work called "*Husbandry in Bengal*" which was first written in 1794 by H. T. Colebrooke who first served as Assistant Collector at Tirhoot in 1786 and from 1789 at Purneah. The value of the work is due to the scholarship and scientific method of its author who had the reputation, as described by Max Muller, that "he never allowed one word to escape his pen, for which he had not his authority."

Robert Knight on the present value of the Gross Rental of 1793.—Robert Knight, the famous Editor of "*The Statesman*" in the eighties of the last century, brought out an edition of Colebrooke's valuable work to which he also contributed an interesting Introduction. He points out in his Introduction that it is fundamentally wrong to estimate the value of the gross assets or rentals of the land of the present day in terms of the days of the Permanent Settlement, when the value of money measured in commodities was nearly four times its present value. According to Colebrooke, about a third of Bengal was then tilled and two-third waste. He also estimated the gross rental of the times at Rs. 4 to 5 crores, taking the gross revenue or assessment upon the Zemindars to be roughly Rs. 3 crores. Robert Knight points out that, supposing the area under tillage now is twice that of 1793 and the value of money two to three times, a rental of Rs. 4 crores paid in 1793 should now be equivalent to Rs. 24 crores. He further states : "Instead of the rental representing to-day as it ought to do, one-fourth to one-sixth of the produce, it is doubtful if it represents even one-twentyfifth. Low rentals are the parent of two very serious evils ; they lead either to the most careless husbandry, as was remarked by Arthur Young in his famous *Tour*, or inevitably beget the practice of sub-letting, with its attendant evils of middlemen, and eventual rack-rent."

Rentals not enhanced with rising prices.—As further pointed out by him, "the Zemindar has carelessly sub-let to the Patnidar, and the Patnidar to men below him, until we have a mass of middlemen tenure-holders to deal with, who would never have come into existence at all, had the Zemindar wisely enhanced his rentals as money changed in value, as the acreage under tillage become wider by the growth of population. The Zemindar's sin has been his careless neglect of his own interests."

Their high rate.—The rates of rentals in the days of Permanent Settlement were, however, quite high. They are stated to have ranged between $\frac{1}{3}$ and $\frac{2}{18}$ of the gross produce, as against $\frac{1}{18}$ of present day.

Since 1793, Zemindars have not enhanced Rents with rising prices and extending cultivation.

Colebrooke describes the agricultural classes of his days as follows :

Sub-letting at rack-rent.—“There are peasants who cultivate the lands they own. There is another class of tenantry who re-let their lands to the actual cultivators at an advanced rent or for half the produce. There are also peasants who superintend the agriculture performed by their servants or by hired labourers. Such are Brahmins and others who are restrained by prejudice from manual labour.”

Thus, in 1793, there were the same classes of cultivators as now, including the Bargadars or Bhagchasis of present day, and sub-letting was equally rampant.

Agricultural Indebtedness.—Colebrooke further makes this fact clear : “Tenants are in the habit of under-letting their lands to other peasants. This class of middlemen is numerous. The under-tenants are depressed by excessive rent in kind and run into debt from which they can never extricate themselves.”

Thus, in 1793, there was the same problem of agricultural indebtedness as now, as well as the same rack-renting of under-tenants and Bargadars as is practised by the Occupancy Ryots to-day.

Again : “Reference being had to the quantity of land tenanted, perhaps the greatest part would be found to be held by tenants who do employ labourers.” “A cultivator who employs servants entertains one for every plough and pays him monthly wages ranging from Re. 1 to As. 8.” But such a ploughman, it is pointed out, worked only for a few hours a day, generally up to noon.

Total Area of Cultivation and Area per head.—Colebrooke, following Cornwallis, estimates “one-third of Bengal and Bihar to be tilled, but this is exclusive of pasturage and lays or fallows.”

He further states : “In Bengal, little more than 1 acre of tilled ground is available for every person.” And now, after more than 150 years, with both the area under tillage, and population, more than doubled, only .85 acre is available per head of agricultural population. The population in Bengal has increased more in proportion than the area under cultivation, with its increasing pressure on soil in consequence.

Uneconomic Holdings.—It also appears that even in the days of Permanent Settlement, Agriculture by itself could not support the agriculturists, holdings were too small, and decreasing in size by subdivision under laws of inheritance, so as to drive the agriculturists to seek supplementary means of living. As stated by Colebrooke : “It is not upon the cultivation of grain that the peasant

depends for his profit or even for his comfortable maintenance. In the grazing Districts, it is the Dairy. In others, it is the cultivation of some more valuable produce such as Mulberry, Sugarcane, Tobacco, Opium, Indigo, Cotton, and Silk as objects of external commerce."

Dairy.—"The profits of the Dairy arise from the sale of Milk, of Curds, and of clarified Butter."

"A peasant does not derive from cultivation the very humble maintenance which we suppose, unless his family share in the labour for which we calculate him to pay, or apply their leisure to other occupations, or unless we take into account the profit drawn by him from the land which he underlets to his ploughmen at half-produce."

Agricultural Prices.—Colebrooke further observes : "A peasant cultivating for half the produce is not so well rewarded for his toil as hired labourers." This was because the agricultural prices were very low.

The agricultural prices of the times are thus stated : Rice, Wheat, and Barley sold at 12 as. a maund ; Ghee at 3 as. per seer. The average price of Cattle was Rs. 5, while the wages of the agricultural labourer amounted to 1 anna sicca=about Rs. 2 per month.

Family Budgets.—Again : "2½ ounces of Salt, 2 lbs. of Split Pulse, 8 lbs. of Rice, formed the usual daily consumption of a family of 5 persons in easy circumstances. Or, according to another estimate, 4 maunds of Rice, 1 maund of Split Pulse, and 3½ seers of Salt sufficed for the monthly consumption of a family of 6 persons, consisting of 2 men, as many women, and the same number of children."

This means that families of 5 or 6 could then live on Rs. 3-4 per month, corresponding in value to Rs. 9-12 of present day.

Agricultural Idleness.—Colebrooke comments on the habits of idleness of agriculturists. This was because "the necessities of life are cheap, the mode of living simple, and a subsistence may be earned without uninterrupted industry."

Profitable Plantations.—Besides cultivation of grain, Colebrooke mentions several profitable agricultural industries of the times such as plantations of Mango-groves, Cocoa-nuts "with a milky juice grateful to the palate", Areca-nuts, Bambus and Date-trees. "The Orchard contributes to attach the peasant to his native soil. Orchards of Mango-groves diversify the plains in every part of Bengal."

Handicrafts: Muslins.—Bengal was then noted for some of her handicrafts and cottage industries. "India has in all times been the country most celebrated for Cotton Manufactures, and even now the finest Muslins of Bengal remain still unrivalled by the fabrics of Great Britain."

Spinning as sole resource of helpless poor and women.—Colebrooke recommends in glowing terms (anticipating Mahatma Gandhi) *Spinning*

as the most important occupation to relieve the distress of the poor peasantry in the off-seasons of Agriculture. His words are worth quoting in full :

"To a Government as enlightened as British India, it cannot be a trifling consideration to provide employment for the poorest classes. No public provision now exists in these provinces to relieve the wants of the poor and helpless. The only employment in which widows and female orphans, incapacitated for field-labour by sickness or by their rank, can earn a subsistence is by *Spinning*, and it is the only employment to which the females of a family can apply themselves to maintain the men, if these be disqualified for labour by infirmity or by other cause. To all it is a resource which, even though it may not be absolutely necessary for their subsistence, contributes, at least, to relieve the distresses of the poor.

"In this view, it appears essential to encourage an occupation which is the sole resource of the helpless poor. That such encouragement would supply commercial advantages to England, we think, can be also proved. For this purpose, it might be shown that cotton-yarn could be imported into England from Bengal cheaper than cotton-wool. Large quantities of linen and woollen yarn are admitted, duty-free, from Ireland. If it be not considered as injurious to the manufacturing interest of Great Britain to permit the importation of linen and woollen yarn, why discourage that of cotton-yarn from Bengal by a heavy duty, besides all the other impediments which we have so often occasion to notice?"

Different kinds of Tenancy.—Colebrooke also gives a valuable description of the different kinds of tenancy then prevalent and also of the relations between the ryot and the Zemindar.

"The ryot must take out a *patta* or lease. *Pattas* may be for payment in cash or in kind. This latter may be for a specific quantity of grain or for an adjustment either by an actual partition of the crop or by estimation. Under the first sort of tenures for payment in kind, a ryot is to render a certain weight or measure of grain for the rent of his farm which is ascertained by its dimensions or its bounds. In the second, the crop is divided when gathered. Usually the rate of distribution is half the produce, though other rates are also known. The third tenure for payment in kind is by estimation of the crop. This is performed by measuring the field and estimating its produce by inspection, but the value of the landholders' portion, at the market price, the tenant pays in cash. A ryot has a title of occupancy, in right of which he may retain his land so long as he continued to pay his rent, in conformity with the custom of the country or with his own particular engagement.

"In addition to the original rent, additional taxes are arbitrarily imposed or required for special purposes, viz., taxes in general, charges, imposed contributions and various fees under different denominations."

Pargana Rates.—Colebrooke further states that the pargana rates, as they were called, had long been lost, or became obsolete, so that Zemindars exacted whatever rental he was able to collect; that tenant right in any form was unknown in any Province; that the utmost confusion prevailed everywhere as to the terms under which the ryot held his lands; and that it was the Zemindar who fixed the rental and he did so annually with due regard to seasons.

Confusion of the times.—Colebrooke further remarks: "In the unquiet times which preceded the Company's acquisition of the Dewani, the officers respected neither prescriptive rights nor established usages."

Status of Zemindars.—Regarding the vexed question of the status of the Zemindars, Colebrooke has the following valuable comment: "In one point of view, the Zemindars, as descendants of ancient independent rajas, or as successors of their descendants, seem to have been tributary princes. In another view, they appear to be only officers of Government. Perhaps their real character partook of both. Numerous landholders subordinate to them as well as those independent of them cannot evidently be traced to similar origin. The Zemindars are now acknowledged as proprietors of the soil.

"If there was hereditary succession among the Zemindars, there was also hereditary succession to offices of account in those days.

"Among the land assessed with revenue, the condition of large Zemindaris was more deplorable than that of smaller estates.

Excessive Assessment.—Colebrooke also states that this deplorable condition of the Zemindars under Permanent Settlement was due to its excessive Assessment. This is explained by him as follows in his refreshingly realistic style :

"Responsible to Government for a tax originally calculated at $\frac{1}{11}$ of the expected rents of their estates, they have no probable surplus above their expenditure to compensate for their risk. A common evil must bear down him who is assessed with $\frac{1}{11}$, or even with $\frac{3}{4}$ of his receipts. Any calamity, any accident, even a delay in his recoveries, may involve a Zemindar in difficulties from which no economy nor attention can retrieve him."

Alienations.—Colebrooke also furnishes valuable information regarding the revenue-free or alienated lands of those days. These were devoted to "charitable purposes which included the maintenance of helpless poor, the support of priests and mendicants, and endowments of temples and colleges." There were also "free lands for Brahmans, Bards, Encomiasts, Ascetics, Priests, and Mendicants, or for provisions to public officers." "The revenue of districts was charged with pensions and customary alms; or it was partly alienated as a fund for these purposes."

"The greatest part of the present free lands of Bengal proper were originally granted in small portions of waste ground."

Revenue in 1784.—Lastly, we owe to Colebrooke the important information that the revenue of the three provinces of Bengal, Bihar, and Orissa (Mednipore) for the year 1784 was as high as Rs. 2,75,59,000.

[*References* : Besides those mentioned in the Text, the following may be mentioned : (1) Firminger's Edition of the *Fifth Report* with Introduction citing extracts from original documents utilised here, (2) Ramsbotham's *Studies in the Land Revenue History of Bengal* and Chapter on the same subject in the *Cambridge History of India*, Volume V ; (3) Ascoli's *Early Revenue History of Bengal* ; (4) Baden Powell's *Land-Systems of British India* ; (5) *Zemindary Settlement of Bengal*, 1879 ; (6) Colebrooke's *Husbandry in Bengal* ; (7) Harrington's *Analysis of the Bengal Regulations* ; (8) Dr. U. N. Ghoshal's *Hindu Revenue System* ; (9) Moreland's *Agrarian System of the Mughals* and Chapter on the subject in the *Cambridge History of India* and (10) Memorandum submitted to the Bengal Land Revenue Commission by the British Indian Association, by the High Court Bar Association, the 24-Parganas Bar Association, Sir Nalini Ranjan Chatterji, Mr. Atul Chandra Gupta, Rai Bahadur Mahendra Nath Gupta and others.]

